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To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THOSE herpetic affections which so frequently appear among the children of the poor, and which are evidently contagious, often prevent the vaccine virus from producing its correct action. The skin, although it be apparently sound at the point of insertion, is nevertheless so influenced by the disease, as frequently to baffle all our efforts to produce a correct pustule, and consequently to secure the constitution from the contagion of the small-pox. The eruptions I allude to, for the most part, correspond with those of the Second Order of Cutaneous Diseases described by the ingenious Dr. WILLAN, under the term *Psoriasis Diffusa.** The face, the eye-lids, the tender skin behind the ears, and particularly the scalp, are the parts most commonly affected; but the limbs and body not unfrequently exhibit the same appearances. As far as I have been able to observe, it is more common among the lower classes of society in the country than in London. It is not uncommon to see it pass through a village school, assuming a variety of characters, according to the state of the constitution of the child affected with it. I do not mean to say, that the pustule† is always imperfect, and not effective, when the inoculated patient has this malady; on the contrary, it is sometimes perfectly correct, and much more frequently so when it has been of

* The labors of Dr. Willan in this rugged field of science, all should acknowledge with thankfulness and gratitude.

† Having in my former Treatises used the term *pustule,* I make choice of it now, lest it should create confusion; though, perhaps, not so appropriate as *pock* or *vesicle.*

long standing, than when in its recent state; and what is remarkable, the disease is then (when of long duration) sometimes swept entirely away. I have noticed this impediment to the perfect formation and progress of the vaccine pustule in my general correspondence for more than two years past, and conceive it to be a more frequent source of the spurious pustule than any other, or indeed than all the rest united. Dr. Marcet inserted some hints I communicated to him on this head, in your Journal, for May, 1803, but I believe they have not been much attended to.

In my Paper of Instructions for Vaccine Inoculation, published some years back, I have endeavoured to guard the inoculator from being deceived by false appearances, by the following observations.

"The vaccine fluid is liable, from causes apparently trifling, to undergo a decomposition. In this state it sometimes produces what has been denominated the spurious pustule; that is, a pustule, or an appearance on the arm not possessing the characteristic marks of the genuine pustule. Anomalies assuming different forms may be excited, according to the qualities of the virus applied, or the state of the person inoculated; but by far the most frequent variety or deviation from the perfect pustule, is that which arrives at maturity, and finishes its progress much within the time limited by the true. Its commencement is marked by a troublesome itching; and it throws out a premature efflorescence, sometimes extensive but seldom circumscribed, or of so vivid a tint as that which surrounds the pustule completely organized; and (which is more characteristic of its degeneracy than the other symptoms) it appears more like a common festering produced by a thorn or any other small extraneous body sticking in the skin, than a pustule excited by the vaccine virus. It is generally of a straw colour, and when punctured, instead of the colourless, transparent fluid of the perfect pustule, its contents are found to be opaque. A little practice in vaccine inoculation attentively conducted, impresses on the mind the perfect character of the vaccine pustule; therefore, when a deviation arises, of whatever kind it may be, common prudence points out the necessity of re-inoculation." The deviation, when it arises from the cuticular disease I am speaking of, generally corresponds with that above recited. I might have added, that if the pustule is not much disturbed in its course by scratching, it commonly terminates in a scab of a pale brown or amber

ber colour, and soft in its texture compared with that produced by the true vaccine pustule. I have abundant testimony to prove, that the fluid taken from a spurious vaccine pustule thus excited, is capable of propagating and perpetuating its like. Indeed, the vaccine fluid, even in a pustule going through its course perfectly, if taken in its far advanced stages, is capable of producing varieties, which will be permanent if we continue to vaccinate from it. I mention the subject briefly now; but it is my intention (as it embraces a wide field) to enlarge upon it, and some others connected with vaccination, when circumstances will permit me. Medical practitioners should be particularly circumspect when they inoculate those who have cuticular diseases. The danger of insecurity would be at once obviated, if on the appearance of an irregular pustule, the disease were to be subdued by proper applications, and the patient then reinoculated. I shall select a case, to show the efficacy of this mode of proceeding.

A family, consisting of five fine healthy-looking children, were inoculated by me at Cheltenham in the autumn of 1803 with fluid virus taken immediately from a proper vaccine pustule. On examining the punctures on the fifth day, I found, that on the left arm of one of the children, the pustule was advancing too rapidly. It was of an irregular form, contained already an opaque fluid, and was surrounded by an efflorescence of a dusky red colour to the extent of one-third part of an inch. Such an intolerable itching was excited, that the boy (who was only three years old) could not be prevented from rubbing it. This appearance led me to an examination, and on the child's head I observed an herpetic blotch not much larger in circumference than a shilling. The hair around the part was stiffened by the concreted ichor oozing from the sore, which had made its appearance about ten days. No eruption shewed itself in any other part of the body. The pustule was repeatedly broken by the child's scratching and rubbing it; and the inflammation on the arm, which began to spread so early, on the eighth and ninth day became very extensive. The child, at the same time, was hot and restless. A soft, amber-coloured scab* now be-

* It may be remarked, that purulent matter cannot form a scab so hard and compact as limpid matter. Hence arises the difference between the variolous and the vaccine scab. It accounts too for the varicellous scab being commonly harder than the variolous.

gan to form; but this being rubbed off, the part ulcerated and healed slowly, leaving a cicatrix deeper and larger than in ordinary cases. The disease on the scalp was now quickly subdued by the use of tar ointment; and at the expiration of six weeks from its commencement, the inoculation was repeated, when the pustule went through all its proper stages with perfect regularity. The rest of the children inoculated at the same time, went through the cow-pox in the ordinary way, without any irregular appearance.

I have selected this case, to shew how slight a local appearance may produce a change in the state of the skin, at a distance from it. I cannot call it a general change in every case, as I have sometimes found a correct pustule on one arm, and a spurious pustule on the other; indeed, I have sometimes found the perfect and imperfect pustule on the same arm, within two inches of each other, when the virus inserted was taken the same instant from the same perfect pustule. It happens that I more frequently detect the disease by the appearance of the arm, than previously to inoculation. Parental fondness is often mismanaged, and induces mothers to conceal eruptive complaints on their children.

These are the constitutions which sometimes shew a few wandering pustulous eruptions after Vaccine Inoculation; and so peculiarly irritable is the skin when influenced by herpes, that the smallest wound, a slight scratch, or the pricking of a pin, for example, commonly produces inflammation, and slight, superficial suppuration.

The preceding year I inoculated another child at Cheltenham, whose face was involved in one general thick incrustation. She had been in this state, without any material variation, upwards of two years, during which time many applications had been used to no purpose. The scalp partook, in some degree, of the same kind of disease; but the body and limbs were free from it, except when any of the acrid fluid, oozing from fissures in the crust, chanced to fall upon the neck or breast; it then invariably produced, for a time, a similar appearance. On vaccinating this child by a single puncture in each arm, the pustules went through their course correctly. On their decline, the incrustation began to be less coherent, and to drop off; and at the expiration of a fortnight, the face was smooth, no vestige of the disease remaining, except a slight inflammation of the eye-lids.

Cases

Cases of this sort have become familiar; Mr. Ring has given several in his very copious Treatise on the Cow-pox; and they have been mentioned by other authors, both here and on the Continent.

I have in like manner sometimes seen papulous eruptions, which have long proved troublesome, speedily swept away..

This I think may be accounted for. The vaccine virus, a few days after its insertion, begins to act upon the constitution. It is then manifest, from a new appearance which these eruptions put on, commonly that of increased inflammation, that a new action has been excited in them. The original morbid action therefore becomes deranged and is destroyed, and consequently the disease is conquered. I have seen many instances where pre-existing pimples have been converted into vaccine pocks, which have kept pace with those on the arms in their progressive changes.

Seeing that the skin, when disposed to reject the ordinary action of the variolous virus, rejects the vaccine also, I shall just observe, it occurs to me as probable, that its herpetic state, at the time of inoculation, has been the chief source of those failures, which many practitioners have witnessed in inoculating for the small-pox: for in many instances where, on subsequent exposure to infection, the disease has been taken, it has been found that the process of inflammation and suppuration on the arms had gone to a greater extent than in ordinary cases, that the symptomatic affections were clearly marked, and that even eruptions, though small and seldom maturating, have appeared. But as the state of the arm became a secondary object in inoculating for the small-pox, our solicitude being directed to what appeared of far more consequence, the number of pustules, I almost despair of obtaining much information on this point.

I shall conclude this paper by observing, that although the Vaccine Inoculator does not inflict a severe disease, but, on the contrary, produces a mild affection scarcely meriting that term, yet, nevertheless, he should be extremely careful to obtain a just and clear conception of this important branch of medical science. He should not only be acquainted with the laws and agencies of the vaccine virus on the constitution, but with those of the variolous also, as they often interfere with each other.

A general knowledge of the subject is not sufficient to enable or to warrant a person to practice Vaccine Inocula-

 tion;

tion; he should possess a particular knowledge; and that which I would wish strongly to inculcate, as the great foundation of the whole, is an intimate acquaintance with the character of the true and genuine vaccine pustule. The spurious pustule would then be readily detected, whatever form it might assume; and errors known no more.

I am, &c.

Berkeley, July 15, 1804. EDWARD JENNER.

To the Editors of the Medical and Physical Journal.

Gentlemen,

In pursuance of a plan I long ago commenced, I now transmit some miscellaneous remarks, which I beg the favour of you to insert. The first is relative to Diarrhœa and Cholera Morbus; diseases which, as Sydenham observes, are as sure to return at this season as swallows in the summer.

I have long been of opinion, that an erroneous theory, with regard to these complaints, has given rise to an erroneous practice. The bile is commonly supposed to be the principal cause of them; but different persons entertain different sentiments, respecting the particular manner in which the bile produces these disorders. Some ascribe it to a redundancy, others to a putridity, and others to an acescency of that fluid.

The last I believe to be only an imaginary alteration of bile, and that it never becomes acid. It frequently meets with more acid in the primæ viæ than it is capable of neutralising; and being evacuated with the other contents of the stomach or bowels in that state, it has given rise to this opinion.

Such an error would be of little consequence, did it not lead to a wrong practice. I have frequently known aperients continued in such cases long after the strength of the patient could bear them; and am perfectly convinced, by much experience, that in general they are not only unnecessary, but prejudicial in these complaints.

At the same time, it must be obvious to every one, that astringents should be proportioned to the disorder; and that whether they are exhibited before aperients, or after them in the usual manner, there is always a possibility of exceeding the bounds of moderation. But any practitioner who

who is conversant in the treatment of such complaints must know, that when constipation follows a diarrhœa, it is easily removed, either by the oleum Ricini, magnesia vitriolata, or a clyster.

The following is a formula, which I have found equally pleasant and efficacious. ℞. Cretæ præp. ℈iv. Pulv. gum Arab. ℈ij. Aq. distill. ℥iv. Aq. cinnam. ℥iß. Sp. cinn. Syr. simpl. a. ʒij. M. To this I commonly add 30 drops of tinct. opii, and direct two large spoons full to be taken post s. l. s.

The following is a convenient form for a draught.

℞. Cretæ præp. ℈j. Pulv. gum Arab. gr. x. Aq. distill. ℥j. Aq. cinnam. ʒij. Sp. cinnam. Syr. simpl. a. ʒß. M. This is also a proper quantity to serve as a mixture for a child. The quantity of tincture for each purpose it is unnecessary to specify, since it must depend on the case.

I embrace this opportunity of pointing out an error in the London Pharmacopœia; or, at least, an alteration, which, I have been informed by an eminent physician, is an error.

When the Dispensatory was last revised, the gum Arabic, in the Mistura è Cretâ, was increased to eight times its former proportion. This, I am told, was a mistake; two ounces being directed, instead of two drachms. It was common, previous to this edition of the Dispensatory, to direct the composition to be made with double the former quantity of gum Arabic; but so remarkable a deviation as that alluded to, could not have arisen from design. It is fortunate the ingredient was a mild one; had it been otherwise, I should long ago have pointed out the supposed error.

I shall take the liberty of mentioning a method, by which the preparation of the Chalk Mixture is facilitated; a circumstance of no small moment, in some places, and at certain seasons, when autumnal complaints are prevalent. The method I follow is, to keep the prepared chalk and the gum Arabic in powder, mixed together in the proportion of two parts of the former with one of the latter, under the title of Pulvis Albus. Two drachms of this powder are sufficient for a six ounce mixture; and half a drachm for a draught, or for an ounce and half mixture for a child.

It must be obvious to every one conversant in practice, that a powder is a more convenient form of medicine for the poor, as well as for those who live at a distance, and cannot have a frequent supply; I shall therefore insert a compo-

composition, which I have found extremely useful, and particularly during the late scarcity of provisions, when, owing to debility and improper foods, a diarrhœa was common, especially among the children of the poor.

℞. Cretæ præp. ℥xviij. Pulv. gum Arab. ℥ix. Sacchari ℥j. Pulv. cort. cinnam. ℈ij. Opii purif. ℈j. M.

I have sometimes substituted ginger for cinnamon, without any apparent disadvantage. This experiment was made for the sake of ascertaining, whether it might not be prepared in this manner, in any place where the expence of cinnamon, or of cassia, might be an object.

Those who have much practice among the poor must know, that a cheap medicine, which can be kept ready prepared, is an object of no small importance. The pulvis è cretæ comp. c. opio is of this kind; but it is not well adapted for children, on account of the bitterness of the tormentil.

Two drachms of this powder is a valuable present to a poor person, whose child labours under a diarrhœa. As much as will lie on a silver penny, or a seven shilling piece, may be given to an infant, in a little water; and repeated after every loose stool. A caution should be given not to add sugar.

This composition may be called Pulvis Astringens. I have known many hundred children apparently rescued from the grave by its salutary effect; and been amply repaid for the trifling expence of the composition by the gratitude of their parents. I therefore conceive it an indispensable duty to recommend the formula to others.

Were it generally adopted, or any better composition substituted, children would not so often be purged to death with rhubarb or magnesia; which, from the manner in which they are now used, or rather abused, may be considered as their bane.

To correct this very prevalent error, in some degree, I have recommended to many paupers, whose children laboured under slight diarrhœa, chalk instead of magnesia. This has been attended, in most instances, with a good effect; but it is sometimes insufficient, and the astringent powder is preferable.

I am far from being convinced, that rhubarb possesses the degree of astringency commonly ascribed to it. But if it be toasted, with an equal quantity of nutmeg, it becomes an excellent medicine as an astringent, and will sometimes succeed when all other astringents fail. The

efficacy

efficacy of this composition is increased by the addition of an opiate, or of any kind of spirit.

A person who had laboured under a diarrhœa for a long time, and been under the care of some of the most experienced medical practitioners, but in vain, was cured in a few days by a drachm of rhubarb and a drachm of nutmeg, toasted, and divided into three parts. Of these, one was taken every other morning, in brandy and water.

The most useful articles of food and drink that I have known in these complaints, when they occur in adults, are beef tea and cold brandy and water. Port wine is a popular, but a fallacious remedy; and in all probability, oftener does harm than good.

It is scarcely necessary to inform any medical man, that such persons as are troubled with this complaint, ought to abstain from vegetables, white meats, and malt liquor. But it is not unnecessary to inform the inexperienced practitioner, that unless he is very strict in his injunction, he will often be deceived in this respect, and be baffled in his attempt to cure his patient.

It must appear evident, from the manner in which I enlarge on this subject, that I think it of the greatest importance. A diarrhœa is one of the most frequent complaints, and attended with danger when it occurs in children, or in others of a weak constitution; and it is well known, that such are most liable to the disorder.

Various reasons are sometimes assigned for exhibiting aperients in this complaint, and even for repeating them, when there is no just reason for the practice; and the remedy is frequently worse than the disease. Among other reasons assigned, are those respecting the colour or the fetor of evacuations. These, however, in a real diarrhœa, are only imaginary reasons for administering a cathartic.

A fetor of the stools is frequently ascribed to a redundancy of bile; but surely this is an error, since it is acknowledged by the best judges, that the bile is of an antiputrescent nature; and every practitioner must know, that when there is an obstruction of the biliary ducts, the stools are often remarkably fetid.

If, in a common diarrhœa, cathartics are not in general necessary, but rather hurtful, they are less necessary, and more hurtful, in a cholera morbus. It is a popular opinion, that such a complaint must not be suddenly stopped. It is not, in general, easy to stop it suddenly; I have, however, sometimes known it yield to a single dose of the astringent; and have observed, that the cure is full as permanent in such instances, as in those where the evacuation

tion gradually ceases. This would not be the case, were the evacuation critical.

It must also be considered, that such disorders are most frequent when the habit is relaxed by a sudden accession of hot weather. Hence a fermentation takes place in the stomach; in consequence of which, and an increased irritability of the whole primæ viæ, the complaints in question are excited. This opinion is strengthened by the common observation, that fruit is the general cause of the disorder. Fruit, particularly that which abounds with an acid, is indeed a very common cause, but far from being the only one of this disease; hard and indigestible substances of any sort, produce a similar effect. But debility, induced by sudden or long prevailing heat, appears to be the principal predisposing cause.

One very common proximate cause of a diarrhœa is stale malt liquor, which has in some measure undergone the acetous fermentation. In this case, as well as in those occasioned by sour fruits, or by an acid generated in the primæ viæ, it is surely more rational to correct the acid, to check fermentation, and to warm and invigorate the system, than to exhaust the little remaining strength by a debilitating plan.

I have sometimes known emetics given in the cholera morbus, but with very ill success. Happily, they are too soon rejected to do much mischief; but they occasion delay. The more violent the vomiting or purging is, the more powerful means are necessary for subduing them; and the more necessary it is to employ such means without delay. In cases of extremity, many a patient would be lost, were not the remedy frequently repeated; but the necessity of such repetition depends on a variety of circumstances, particularly on the quantity retained by the stomach.

The most distressing symptom in a cholera morbus, both to the practitioner and the patient, is the vomiting. To remove this, the medicines before mentioned are not ill adapted; but there is nothing which I have known so readily succeed, in some cases, as a small quantity of brandy, given alone, or with a dose of tinct. opii, adapted to the nature of the case.

Large quantities of chicken-broth were formerly given to persons labouring under this complaint. Such a practice was probably the result of the humoural pathology; and founded on error. As far as I am able to judge, it is pernicious; and only protracts the disease. The patient should

should rather abstain from drinking; to which he is in many cases prompted by violent thirst: but what he drinks, unless the quantity be very small, only aggravates the disorder.

This complaint is not so fatal as might be expected; but the sufferings of the patient are so great, as to demand every assistance that art can give. I many years ago communicated my sentiments on this subject to a physician, who has long superintended the publication of this work, with honour to himself, and advantage to the public. His ideas were different from mine; and similar to those commonly entertained by medical practitioners. It was, however, no small gratification to me, and no small confirmation of the propriety of the practice I had long pursued, that this gentleman, some time afterwards, acknowledged he had also tried it with advantage.

A remark made in the Medical Journal, on a practice somewhat analogous to this, in one part of America, proves that the learned Editor has had no reason to alter the favourable opinion he entertained of this mode of treating diarrhœa and cholera morbus. He has had the candour to acknowledge, in a very respectable society, that he first adopted the practice at my suggestion; and that he still found it prove successful. This I mention, because I am sensible what weight his opinion will have with the members of the medical profession.

It is not without great concern, I am compelled to be a daily witness of the injury resulting from a contrary practice; which I am confident, sends a multitude of victims to an untimely grave, particularly of infants. What adds to the mischief is, a very prevalent opinion that a diarrhœa is salutary; and particularly during the period of dentition. This is often carried so far, that children are supposed to be in no danger who cut their teeth with a purging. How absurd this opinion is, it is unnecessary to inform any one of experience and discernment. It is a vulgar error, of a most fatal kind. I have particularly remarked, that no children suffer more from dentition than those who labour under this complaint. It particularly attacks those who are already weak; rendering them still weaker; and it must be apparent to every person, that debility at the same time retards the growth of the tooth, and occasions irritability of the gums, as well as of the whole system. Hence the sufferings of an infant are augmented, and prolonged; and a fatal catastrophe is a frequent result.

A diarrhœa

A diarrhœa is often occasioned by given children cathartics after eruptive diseases; a practice which medical men in general acknowledge to be totally unnecessary; and I hope, in time they will discontinue what, they must perceive, is hurtful. It is also a common custom with the lower classes of the community, to give children aperients for heat of every species; whether it proceeds from teething, from a cold, from the season of the year, from close and crowded apartments, or from a feather-bed. This custom, indeed, is not confined to the poor: and it may be doubted whether, in modern times, magnesia has not killed more than the sword.

Purging medicines are also considered by the ignorant, (a numerous tribe) as indispensably necessary in every kind of cutaneous disorder; and nothing is more common in this metropolis, than to give a child magnesia, or a course of alteratives, for a bug-bite.

This is a species of eruption that deceives parents and practitioners more frequently than any other. It is, indeed, by far the most common eruption of any in great towns; and affords the ignorant and the malicious an excellent opportunity of abusing the cow-pox. They call it a humour; and pretend it is owing to vaccination. It assumes various forms: at first it is like the sting of a nettle, or a nettle rash; afterwards it resembles a miliary eruption; then, as it gradually declines, it resembles a common rash. It has, however, often been dignified with pompous names; and been the subject of many a grave consultation. It sometimes is pustulous, and mistaken for the small-pox; and on this, as well as many other accounts, is not to be considered as unworthy of notice in a Medical Publication. It principally affects those parts which are uncovered, as the face, neck, and the fore arm. The upper part of the arm is generally free from this eruption; which affords an easy method of detecting the nature of the complaint.

It is often mistaken for the itch; and sulphur is applied in vain, till winter comes and removes the cause of the distemper. I am, &c.

JOHN RING.

New Street, Hanover Square, July 17, 1804.

CASE

Case of Brainular Affection from an internal Cause; *communicated by* W. Patterson, M.D. *of Londonderry.*

THE 14th of December, 1803, a gentleman, aged above sixty years, was suddenly attacked with a severe pain in his forehead, accompanied with so much megrim and stomach sickness, as would have caused him to fall, had he not received support. To these symptoms were added a coldness; but from the reporter I could not learn that the coldness arose to a visible shudder. He was put to bed, and recourse was had to medical advice; according to which, blood-letting pretty largely in the arm, purging, and blistering the back, legs and head, in succession, were the measures pursued.

Four days subsequent to the seizure, I was called to visit him, and found him in bed, complaining grievously of a violent pain in the forehead, together with an irksome stricture in the eye-balls and in the surrounding teguments. The functions of the brain were impaired by a degree of stupor; but when spoken to in a round tone of voice, he could give tolerably correct answers to the questions that were put to him; yet very speedily would he relapse into the same state of stupor, attended frequently with incoherent mutterings. His pulse at the wrist was unequal, labouring, and accelerated, with a tenseness in the coat of the vessel; at the same time, the temporal arteries throbbed considerably, but were uniform in their action.

The countenance was sometimes pale, sometimes reddish, and at other times suffused with a bluish tinge; the eyes were languid, and the sense of vision seemed so much diminished, that at certain periods one would suspect that it were totally lost, had it not been found that the pupils were influenced by the light of a candle directed on them at various distances. The temperature of the skin was sometimes pretty high, more frequently below the medium warmth, and generally felt languid and flaccid.

For fluids, there was sometimes an urgent thirst; but for solids, little or no appetite remained. His stomach, indeed, continued to have a loathing, and so retrograde a disposition as to approach towards vomiting, which he himself considered to proceed from vitiated bile. His bowels were sluggish, and had not emptied themselves since the operation

operation of the laxative medicine, which was a space of thirty-six hours before I saw him. He was restless, tossed much in the bed; and when he did appear to get sleep, it resembled a morbid comatose state more than a salutary repose. The organs of respiration did not appear to be particularly engaged, nor were their functions so much impaired as might be expected from the acuteness of the case. The urinary organs were equally unaffected.

From the preceding phenomena, I concluded, that there existed a determination of blood to the head, with increased tension in the arteries of the part. Under this impression, I ordered local evacuations, by means of numerous leeches to the temples, and a brisk cathartic to excite and empty the bowels, as well as to promote an equilibrium in the general circulation. The first application of the leeches procured a sensible relief; and therefore it was repeated. The cathartic was not active enough in its operation, and accordingly a stronger one, composed of calomel and aloes, was soon given, and with manifest advantage. The stupor in a short time decreased, and was succeeded by a loud talkative raving, accompanied with an unconsciousness of persons and things around him; of which inattentive state a remnant continued during several days, as particularly indicated by an illusion respecting the place where he lay. The delirious condition lasted some hours, and was followed by a profound sleep, attended with a stertor resembling that of apoplexy, but distinguishable from it by several circumstances, in particular by a softness and equable movement in the pulse.

This change, which occurred within eight days, was the harbinger of convalescence, which gradually, but slowly, took place. The principal impediments in the progress were a tardy return of appetite, and an indisposition to sleep at night, both which remained nearly a month. At present he enjoys as good a share of health as his age and constitution will admit; but his eye-sight remains impaired, and he sometimes feels a degree of pain in the region of the forehead.

Considering the symptoms and phenomena of this case, I am led to conceive, that we would be justifiable in setting it down as a decided instance of apoplexy, some leading marks of which it manifestly wanted. No doubt it might, like other diseases of the brain, have terminated in a manner resembling an apoplectic catastrophe; but, if it had any shade of the apoplectic character, it certainly was rather

rather of an anomalous description. It assumed so many of the features of a species of erysipelas, which takes place in the membranes and vessels of the brain, in the evening of life, that I cannot forbear classing it as a variety of that affection. I never have seen legitimate apoplexy take into its train so many symptoms of pyrexia, and terminate by so marked a crisis. Add to this, that, in the preceding spring, he had a similar attack, attended with a more tedious head-ach, which was succeeded by a salutary inflamed eruption on the face; and that, in this country, not long before the second seizure, he had a fit of the ague, to which he was subject abroad. As to the non-appearance of cutaneous inflammation, on the latter occasion, the repeated blistering might be vicarious of that phenomenon; of which the only external spontaneous token was a glutinous discharge from the conjunctivæ and edges of the eye-lids, especially those of the left side.

July 7, 1804.

New Method of obtaining Concentrated Vinegar. By Mr. Krueger.

Take red sulphat of iron, 3 ounces; acetit of lead, half an ounce. Mix them, and put them into a retort with a long neck; and having given a strong fire, two drachms of a very concentrated vinegar will pass over into the receiver. This acetic acid is quite pure, and has neither a sulphurous smell, nor does it contain sulphuric acid or lead. It is perfectly similar to that prepared after Westendorf's and Louitz's method.

New Mode of making Lac Sulphuris.

Eight parts of sulphat of potash are ignited in a crucible with one part of charcoal powder; and after the mass becomes liquid, it is dissolved in four times its weight of water, and boiled; during which time sulphur is added till it can be no more dissolved. The mixture is afterwards diluted with twenty parts of water, and suffered to stand. Then it is decanted, and precipitated by diluted sulphuric acid. The quantity of this production amounts to one-half of the sulphat of pot-ash which has been employed. The sulphur may be also precipitated by concentrated vinegar, in order to obtain, at the same time, acetite of pot ash.

Account

Account of Diseases in an Eastern District of London, from June 20 to July 20, 1804.

ACUTE DISEASES.

Peripneumonia	2
Enteritis	1
Rheumatismus Acutus	5

CHRONIC DISEASES.

Tussis	10
Dyspnœa	5
Tussis cum Dyspnœa	17
Hæmoptysis	2
Phthysis Pulmonalis	4
Hepatitis Chronica	2
Scrophula	3
Chlorosis	5
Paralysis	2
Cephalalgia	5
Convulsio	1
Ascites	3
Anasarca	4
Hydrothorax	3
Hæmorrhois	4
Rheumatismus Chronicus	14

PUERPERAL DISEASES.

Menorrhagia Lochialis	6
Ephemera	4
Abscessus Mammæ	1

INFANTILE DISEASES.

Pertussis	7
Ophthalmia	3
Spina Bifida	1
Herpes	5

The patient referred to in the list, as afflicted by convulsions, was frequently attacked by symptoms very nearly resembling those which sometimes precede the epileptic paroxysm. Epilepsia, indeed, in most instances, occurs so suddenly, as hardly to give any warning to the patient himself, or to those who are near him; but at other times the disease is preceded by some milder symptoms, and a giddiness, tinnitus aurium, pain of the head, palpitation of the heart, and slight spasmodic affections in different parts of the body, introduce the complete paroxysm. Several of these symptoms occurred in the case referred to. Considerable pain in the head usually accompanied the convulsive twitches in the face, and other spasmodic affections.

Being informed that medicines of the antispasmodic class had been very liberally administered, without procuring any relief, leeches were directed to be applied to the temples. From this evacuation considerable relief was obtained; and the bowels being kept open by gentle eccoprotics, the patient continued free from his complaint during a longer interval than he had before enjoyed.

Upon a return of the symptoms, leeches were again applied to the temples, and a blister was placed behind each ear, and kept open for a considerable time by ung. Sabin. since which he has not had any return of his complaint.

To

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

A Delicate female, ætat. 25, sent for me on the 19th of May, who I found labouring under a complication of diseases; she had been for some time subject to dysentery, and now was seized with a more formidable and alarming complaint, namely, pneumonia; inspiration was attended with the most acute stitch of her right side, and she was obliged to be propped up in bed, not being able to endure a recumbent posture; her pulse was full and frequent, countenance flushed; and though she was much debilitated by the alvine discharge, phlebotomy appeared to be the only remedy calculated to afford relief in this dilemma; I therefore took from her arm twelve ounces of blood, sent her a refrigerant medicine, and left the strictest injunctions respecting her regimen.

On the following day, the smallest amendment was not perceptible; the stitch, purging and pyrexia continued with unabated violence. I now determined to give the *tinct. digitalis* a fair trial, but thought I should not be justified by leaving my patient in so much distress, without again availing myself of the advantage of another bleeding; I accordingly drew off eight ounces more, and sent her a blister, to be applied to the part, with these draughts: ℞. Spt. æth. nitrosi ʒj. tinct. digitalis gtt. 40, aq. puræ ℥ij. M. ft. haust. mitte no. ij. capt. j. bis de die. In the evening I visited her, and sent another nitrous draught, omitting the digitalis, not wishing to push it any farther the first day.

On the 21st, I found her in a recumbent posture, inclining to her right side; she said the smallest movement from the present position, occasioned inexpressible torture; her countenance was less flushed, and her skin felt moist, but she observed that the stitch was as bad as ever; she neither could bear any one to move her, nor could she alter her position. Let me ask any of my medical brethren, if a repetition of bleeding was not plainly indicated, according to the received opinion of all authors; and such treatment would have been considered sound practice, and would most assuredly have been adopted by any one, whose experience had not taught him, that there yet remained a remedy, which surpassed the most sanguine expectations that could have been conceived of it, in the cure of

phthisis pulmonalis; and reasoning ipso facto, about the modus operandi ejusdem medicaminis, in this disease, would be encouraged to hope for success from its administration in pneumonia also. As her purging and tenesmus still remained, I this day increased the digitalis to gtt. 100, (omitting the spt. æther nitros.) which she took at three different periods, that is, to gtt. 33 to a dose.

The 22d, she was able to alter her position, and observed the air descended further into her lungs, though a hasty inspiration could not have been endured. Her pulse had sunk considerably; her face bore evident marks of anasarca, its enlargement and puffy feel being noticed by herself and every one who saw her. I had sufficient cause to congratulate myself on the resolution I formed, of abandoning the use of the lancet, although the last blood I took away, exhibited that cup-like appearance so frequently observed, having the edge of the crassamentum curled in, and its whole surface covered with a very thick crust of coagulable lymph. The same quantity of digitalis was continued this day.

The 23d, she was able to set up in bed, respiration became easy, and she only complained of soreness in the part; her pulse was now about 60, and as the danger from inflammation vanished, I began to direct my attention to the state of her bowels; the aliment passed off almost as fast as it was received; pain and tenesmus she still suffered greatly from. ℞. Tinct. opii gtt. 40, digital. gtt. 30, aq. puræ ℥ij. M. ft. haust. horâ decubitûs sumend. I have an idea that digitalis counteracts the stimulant effects of opium, which was my reason for combining them in this instance.

The 24th, she passed a tolerable night, and to day took the two following draughts. ℞. Tinct. opii, gtt. 30; digit. gtt. 20, aq. puræ ℥ij. M. ft. haust. A. M. et horâ somni.

The 25th, her motions were less frequent. I now omitted the digitalis, and gave her pulv. ipec. comp. gr. viij ter de die; this medicine by the assistance of cret. ppt. occasionally conjoined, with a generous diet, completed the cure.

On the 4th of June she was free from every complaint, debility excepted, continuing to regain lost stamina. I forgot to mention that this woman was suckling a stout boy, twelve months old, which I prevailed upon her to wean.

Another instance of pulmonic inflammation occurred to me the other day, occasioned by living freely, and blowing too much upon musical instruments. My patient was a young

young miller, attached to a volunteer corps; and in this case the digitalis was crowned with the same success; in less than twenty-four hours, his pulse, which had been at 120, was reduced to 60; his countenance though highly crimsoned, by the same mean, was changed to its natural aspect.

I have to observe, when we are called in to visit patients in this acute and dangerous disease; that it would be improper to trust entirely to the effects of digitalis, because some time will elapse before it exerts its influence in the body, so as to check the undue impetus of the blood; but as no time can consistently with the safety of the patient be lost, I conceive it ought to be administered immediately after the first bleeding, in a quantity proportioned to the urgency of the case, and it will frequently happen that a second bleeding may be requisite, before this potent sedative has effected our purpose.

I imagine it operates chiefly on the nervous system, and is indued with the peculiar property of restraining morbid excitability, or in reducing the increased mobility of the vital principle to its proper level and healthy standard. How often the lancet has been, and is still, used in pneumonic cases, is too well known to every practitioner; and who is there that has not witnessed the melancholy effects emanating from this mode of depletion? pining *atrophy!* lingering *dropsy!* and a variety of evils, occurring so frequently, as to render a particular account of them in this place quite unnecessary, occasioned entirely by robbing the body of that *pabulum,* which is the sine quâ non of its existence.

I think it fair to conclude, that my female patient, who was nearly worn thread-bare by disease, previously to her having been seized with pneumonia, would in all probability have died dropsical, if the lancet instead of digitalis had been solely confided in. Then, what inferences may be deduced from this conclusion? The happiest presages may surely be formed of its salutary effects, when employed as frequently as its virtues demand it should be.

This medicine admits of more extensive application than many may suppose; in *asthma,* it will afford great relief. I had a patient the other day, to whom I administered the remedies generally used on these occasions, without deriving any advantage from them; but as soon as he took this medicine his health improved daily. It is in this complaint as well as many others, that theory and practice are at variance, yet I must say, according to the opinion I

 have

have formed of it, that the Materia Medica cannot boast of a medicine, which does in a general way more effectually fulfil every intention, considered in a pathological point of view. Some time ago, I used it in ascites and anasarca: A man, aged fifty-five, who laboured under an intermittent a considerable time, in Essex, was so much reduced by it when he applied to me, that I formed a very unfavourable prognosis of him; the cells of the adipose membrane from head to foot were filled with water, and the *abdomen* so much distended that it did not contain less than three gallons of fluid. His intermittent, a quotidian, was easily cured by *zinc. vitriol.* (a medicine which I took occasion to recommend the other day in your Journal) gr. v. indies; after which, he took squills, calomel, &c. rubbing in ung. hydr. fort. during this course. The squills, though given in liberal doses, were of no avail in discharging the water; but as soon as digitalis was employed, the extravasated fluid soon made its exit, in copious quantities, and the man is now enjoying good health, free from any appearance of fresh accumulation.

As the human mind is ever liable to run into extremes, outstripping the boundaries of calm and dispassionate reason; I wish to observe, that the high opinion which *I* entertain of this remedy, is founded on the unerring test of experience, the guide and polar star of every science, and which is the only rational way by which we can hope to attain to any mode of improvement in Physic, that in so many instances is veiled by a mist, through which the brightest beams of human understanding cannot penetrate.

After having most faithfully represented cases in support of this excellent medicine, where its effects must appear so evident and striking, as to defy and put keen edged casuistry to the blush; need I fear the snarls of the incredulous, or care for the distempered remarks of the idle disputant, who more for the sake of displaying his controversial powers, than benefitting society, so frequently takes shelter under a borrowed name, and thus cowardly, when secure behind the bastion of obscurity, lets fly his envenomed shafts.

There are men whose timidity prevents them from venturing out of the beaten track of their predecessors; it is not from *such* that we can expect improvements, particularly in Physic, where so much remains to be done; for as a Professor properly observes to his pupils, "Your present instructions are only intended as a foundation on which you are to build." As if conscious of innumerable difficulties,

difficulties, which must ever remain insurmountable, should the mind not be suffered to soar beyond the narrow limits of scholastic dogmas.

> De tuo ipsius studio conjecturam ceperis
> An veritas aut perfidia hanc mentem gubernat.

I shall conclude with a borrowed phrase reversed, mehercule digitalis sedat! I am, &c.

Romsey, Hants, July 1, 1804. RALPH CUMING.

On the present State of our Knowledge of Opium.

By A. F. Gehlen, *of Berlin.*

(Continued from our last pp. 38—44.)

MR. JOSSE likewise remarks, that the water with which opium is washed, and which contains the extractive matter in solution, becomes fatty, and that also the surface of the glutinous matter remaining on the filtrum is covered with a coloured fatty cuticle, which he takes to be merely accidental, as he thinks it may be derived from the oil or fat with which those persons who prepare the opium-cakes in Asia anoint their hands. This opinion, however, is by no means probable, particularly as the late observations of Derosne and Proust, have evinced that an oily matter is really contained in opium. Proust thinks it to originate from the pollen of papaver, thus partaking of the nature of wax. This conjecture is confirmed by Mr. Derosne's method of obtaining it. After having several times extracted the opium with water and then with alcohol in gentle heat, he let alcohol boil with the residuum, and filtrated the liquor, which on cooling deposited an oily solid black brown substance. This being again dissolved in boiling alcohol, it was also precipitated on cooling in a very divided form and with a yellowish grey colour. It is now known to be a property of wax, that it dissolves in boiling alcohol, but is again separated on cooling. Mr. Derosne obtained from one pound of opium about an ounce of this substance, which, as this gentleman says, imparts the particular smell to opium, and is the only constituent that retains it, while the other constituent particles entirely lose this odour. Hence it may be explained, why Mr. Josse could ascribe the smell and stupifying qualities of opium to what he calls gluten, as this oily substance could not be separated from it, according to his manner of proceeding.

Another substance, which has been likewise overlooked in some of the modern analyses, is a particular saline matter, already noticed by Neumann, Hoffmann, and Tralles, who thought it to be an acid; an opinion lately renewed by Mr. Proust. The observations however which Mr. Derosne has published on this subject are the following. He extracted opium with ten times its quantity of distilled water, which operation he repeated till all the parts soluble in water were separated, and he gently evaporated the liquors, which he had thus obtained, to the consistency of a thick syrup. On cooling, the thick liquor became granulated, which seemed to indicate the presence of a separated substance. On diluting it with four parts of water it appeared turbid, and a considerable sediment was separated on the bottom of the vessel. The liquor being decanted and again evaporated, still yielded a small portion of it. After having collected it on the filtrum and washed it, it showed a dark brown colour, and at the first sight seemed to be composed of resin and oxydated albuminous matter; but on examining it more closely, it appeared to consist of an innumerable quantity of small shining crystals. Boiling water drew out of it a small portion of extractive matter. Alcohol, when boiling, dissolved them, but on cooling deposited them again in a crystalline form. The same substance may be obtained by treating the residuum, which is not soluble in water, with alcohol.

Mr. Derosne having digested it with six parts of alcohol, in a heat of 35°—40° Reaum. filtrated the dark red liquor when still warm, which on cooling deposited crystals. By repeated solution of this substance in alcohol and crystallisation, it is obtained quite pure and free from resin and the abovementioned oily matter. One pound of opium yields about 40 grammes French weight. In this state, purified by repeated crystallizations, opium appears white and crystallized in regular fasciles or prisms. It is without smell and odour, not soluble in cold water, but dissolves in 400 parts of boiling water, from which however it is again precipitated on cooling. Tincture of turnsol is not reddened by it. It requires of boiling alcohol about 24 parts for solution, but in the cold about 100 parts. One of the most distinguishing characters of this substance is its easy solubility in acids, vegetable as well as mineral, without the assistance of heat. On saturating such a solution with an alkali, that substance is precipitated in form of a white powder. It is made somewhat soluble in water by caustic alkalies; but it is precipitated from this solution by adding

ng a small portion of an acid. It is dissolved by ether and volatile oils in the warmth, but separates again in a liquid oily form, and shoots soon after into crystals. Thrown on living coals it takes fire, and burns with the same flame as other combustible vegetable substances do. When heated in a spoon it gradually melts like small pieces of wax. When exposed in a retort to a gradually increased fire, it begins to melt and to puff up, whereby the retort is filled with white fumes which are condensed near the neck of the retort as an oily yellowish substance, and at the same time some phlegma with carbonat of ammonia passes over. Towards the end of the operation carbonic acid gas, dry ammonia, and carbonated hydrogen gas are disengaged, while there remains in the retort a voluminous, light, spongy, and shining coal. The oily substance deposed in the neck of the retort is very tough, and possesses a particular aromatic smell and an acrid taste. Nitric acid poured on the grossly pulverised crystals imparts to them a reddish colour, dissolving them afterwards with great ease. The solution, heated and evaporated, yields crystals of oxalic acid in a proportionably great quantity. The residuum of the solution is very bitter.

From the just mentioned properties of this substance, Mr. Derosne thinks himself entitled to consider it as a particular matter, and as a new proximate constituent of vegetables; and he remarks, that on account of those properties it can be no acid, as has been maintained by some chemists. The easy solubility of this substance, and likewise of the resinous and oily particles of opium in acids, may account for the action of vinegar, employed as an antidote of opium, and he believes that other acids operate in the same way, and are capable of preventing the deleterious effects of opium by dissolving those difficultly soluble parts of that substance. This opinion is contrary to that of Mr. Josse, who thinks acids to be very prejudicial to the body when opium has been given, as deleterious substances have a greater efficacy in a dissolved form; Mr. Derosne, however, assures us, that he has administered from six to eighteen grains of opium to dogs, which were all affected with the symptoms attending too great a dose of that substance, but most of them were relieved and cured by giving them vinegar.

Caustic and carbonated alkalis produce a copious precipitation in the aqueous solution of opium; Mr. Proust considers this precipitate as pure resin, but Mr. Derosne thinks it to be a compound substance. He added to a

I 4 solution

solution of opium in six parts of water, prepared in the cold, a solution of carbonat of kali, till nothing was precipitated. The remaining liquor, after being a little evaporated, yielded another small portion of that precipitate, which, when washed with cold water, had a greyish colour, a granulated appearance, and not much taste. Boiling alcohol dissolved about three-fourths of it, and received a dark red colour; and the solution being filtrated, yielded on cooling, an irregular reddish crystallization. The remaining alcohol contained another small portion, which could be separated by evaporation. The part which had been insoluble in alcohol was dissolved in boiling water; the solution had a dark colour, but on cooling a white powder fell to the bottom, which after being edulcorated and dried, was insoluble in boiling water, but thrown into a red hot crucible burned with a variously coloured flame, leaving behind carbonat of lime with a little kali. The same result was observed in that part which remained insoluble in water, on being dried and burnt. The part of the precipitate produced by alkali, which was insoluble in alcohol, consists consequently of lime, and a vegetable matter. The crystalline substance separated from the alcohol was the same which I have above mentioned, though it showed some difference, arising from the different manner of obtaining it. Its taste is a little bitter; it does not crystallize so regularly, and it seems to be more soluble; its solution changes the blue colour of the syrupus violarum into green. Being heated it crackles before it melts. Its solution in alcohol is not rendered turbid by the addition of water, but some time after small crystals appear in the liquor. The dry distillation yields the same results as have been above mentioned, except the remaining coal being less voluminous, and containing after the incineration more alkali, which seems to account for the little differences observed between this and the foregoing substance.

The aqueous solution of opium reddens the tincture of turnsol, according to Mr. Derosne, thus indicating the presence of an acid. He thought to discover the latter in the alkaline liquor, standing over the precipitate produced by alkali, on which account he evaporated the liquor to the consistency of a syrup, and suffered it to stand for several days, in order to produce a crystallization. Some time after crystals were found to be formed in the liquor, but they were few, and so combined with the extractive matter, that Mr. Derosne could not examine them.

On

On the whole, he thinks that the acid present in opium is nothing else but acetic acid, which is so frequently met with in other vegetable extracts. Besides those crystalline substances, the watery extract of opium contains, according to Mr. Derosne's researches, extractive matter and resin, which last is contained in it in a greater proportion, when the solution is made more concentrated, because the extractive matter renders the resin soluble. The latter however separates from the watery solution, by evaporation, to the consistency of a syrup, and by dissolving the extract again in form of a soft tough mass, which afterwards hardens. It may be perfectly separated by a proper treatment with alcohol, whereby part of it remains insoluble, which Mr. Derosne takes for oxydated extractive matter, and Mr. Buchholz for a close combination of resin with gluten. Lastly, the watery solution of opium contains some sulphat of lime and sulphat of kali, which may be separated by alcohol or by the incineration of the extract. The residuum of opium, which has been extracted with water and alcohol, consists of vegetables, frequently mixed with sand and small stones, from which, according to Mr. Derosne, a small portion of amylum, of mucilage and gluten may be extracted by boiling water. Mr. Buchholz obtained from the residuum, kaoutshouc, by treating it with ether.

From all those experiments and observations respecting the nature of opium, the following results may be drawn.

1. It is not yet sufficiently known in what manner opium is prepared in Asia, nor is it probable that common opium is the juice extilled from the poppy heads, inspissated in the air; as, according to Mr. Dubuc's observations, the juice spontaneously extilling from the capsules is not possessed of the narcotic smell, which common opium always possesses. The observations of Dubuc, and of Kuhn, lead us to conclude, that the opium extilling from the incisions of the capsules is kneaded and mixed with the fermented mass of squeezed poppy heads and leaves, and afterwards wrapt in the leaves of the plant.

2. Opium is a very compound substance. Besides the volatile narcotic principle, it contains *extractive matter, mucilage, resin,* and, according to several observations, *an oily matter,* resembling wax, to which the narcotic and deleterious properties of opium are by some particularly ascribed; farther, *a crystalline substance,* which is neither of a saline nor an acid nature; *a substance* similar to the albuminous matter which is separated from green vegetable

ble juices, and which some consider as *gluten;* a small proportion of *kaoutshouc,* and the remainder of different vegetable particles. The proportion of these constituents seems not always to be the same; and from want of comparative examinations, it is not as yet ascertained whether all sorts of opium contain the same constituents, some of which undoubtedly require farther examination.

Letter from Dr. De Carro, to the Editors of the Bibliotheque Britannique.

GENTLEMEN,

YOU have seen by my preceding letters, and my work on Eastern vaccination, what a rapid progress that happy discovery has made in Asia. Hitherto we have not heard that it was extended into the peninsula of Indostan; but a letter from Bombay informs me, that the vaccine practice is general from Cape Comorin to Delhi. I have just experienced a fresh gratification, that of having laid the foundation of the same practice in Persia. The occasion was as follows.

Dr. Milne, who is attached to the English factory at Bassora, after inoculating a great number of the children of that city, had experienced an interruption in procuring a supply of fresh matter, and had trusted to impregnated threads, lancets, and glasses. Having to his great mortification, found all these means fail, he wrote to me in the month of May last, earnestly requesting me to send him some matter by the earliest opportunity. With the utmost care, I collected it on ivory lancets, and impregnated lint with it, according to the excellent method of Messrs. Ballhora and Stromeyer. Meanwhile, Dr. Milne was obliged to quit Bassora, and to repair to Bashire or Abusheher in Persia. My packet, which was dispatched from Vienna at the beginning of August, not finding him at Bassora, was forwarded to him at Bashire, where it arrived about the end of November. Dr. Milne and Mr. Jukes, an English surgeon, who despaired of success with matter nearly four months old, were agreeably surprised to find the lint impregnated with a matter that was yet liquid, and which produced the desired effect the first time they made trial of it. The ivory lancets, on the contrary, produced no effect at all.

I know not, in the history of the cow-pox, any more satisfactory

satisfactory examples of the benefit arising from care and attention in the manner of collecting the vaccine matter, than the success of the packets which I sent some time since to Bagdad and lately to Bashire. We have seen the incalculable benefit produced by the former; and I have every reason to hope, that the latter, which has been so happily transmitted to Persia, will produce effects equally salutary in that extensive and celebrated empire.

Dr. Milne and Mr. Jukes write me from Bashire, on the 11th and 15th of January, that their first success has made the most powerful sensation in that town, which now carries on the greatest trade of any in the empire; and that the people flock to them to have their children vaccinated.* They likewise inform me, that a mission is on the point of setting off for Tehran, the seat of the government, and that Mr. Jukes, who is to accompany it in the quality of surgeon, has taken the most effectual measures, to procure the patronage of the governors of provinces in favor of the cow-pox, and even to explain the history of its utility to the sovereign to whom they will be presented. I am extremely impatient to receive farther accounts of this expedition. Mr. Jukes has engaged to correspond directly with me. Dr. Milne, who has been called to Bombay, is succeeded at Bassora by Mr. Donald, who purposes doing all that lies in his power to promote the propagation of the cow-pox. The East India Company has taken into consideration my endeavours to introduce the vaccine practice into the British settlements; and the Secretary to the Court of Directors at London, has acquainted Mr. Paget, the Ambassador from England to the Court of Vienna, in a letter

* This is not yet the case in Europe, though so proud of her superiority in knowledge over the natives of the East. In a country where the government has bestowed the utmost attention to render vaccination general, the small-pox still continues to make dreadful havoc. The Canon Gattoni informs me, that in the small town of Como, his native place, notwithstanding the repeated invitations of the government, the exhortations of the clergy, the zeal and persuasions of Dr. Carloni, a physician appointed for the purpose of diffusing the vaccine practice, the intrigues of a few ignorant and envious professional men still prevail to such a degree, that in the two last months of 1803, nearly three hundred children, whose parents had obstinately refused to suffer them to be inoculated with the vaccine, were carried off by the small-pox. The government testified its grief on the occasion by a solemn proclamation. But as the distemper spared all the children who had been vaccinated, it is to be hoped that such a striking instance of the excellence of this preservative will not be lost, but will prevent the recurrence of similar disasters.

letter dated December 9, 1803, that the Directors have voted two hundred guineas to purchase a piece of plate for me.

Now I am speaking of presents, I have likewise received from the Hospodar of Moldavia a superb Indian shawl, which his serene highness accompanied with an extremely obliging letter that he was pleased to write me, and in which he gives me an account of the efficacious measures he has taken to propagate the cow-pox in that principality.

I am, &c.

Vienna,
March 27, 1804.

J. DE CARRO.

Botanical Description of British Plants.

(Continued from our last, pp. 28—37.)

Class V. Pentandria.

Pentandria, Monogynia.

1. Lithospermum. *L. arvense. L. Vulgare. Anchusa degener.*

Ang. Bastard gromill, salern, corn gromwell, painting root, bastard Alkanet.

Gen. Desc. Bloss. funnel-shaped, tube long, slender, open, without valves at the mouth. cal. 5-div. nuts 4, very hard, imperforated.

Spec. Desc. *Seeds* wrinkled, generally 3 perfect with 1 abortive. *Bloss.* hardly longer than the cup, white. *Roots* crimson red, *corn fields.* Bloss. May, June.

Use. The girls in the north of Europe use the juice of the bright red roots of this plant for the purpose of painting their faces on days of festivity. The bark of the root tinges wax and oil of a beautiful red colour, similar to that obtained from the foreign alkanet root, which is sold in the shops. Sheep and goats eat it; cows are not fond of it; horses and swine refuse it.

2. Cynoglossum. *C. officinale. C. vulgare.*

Ang. Great hound's tongue.

Gen. Desc. Bloss. funnel shaped, mouth closed by projecting valves; nuts 4; depressed, fixed to the style by the inner side only, imperforated

Spec.

Spec. Desc. *Stamens* shorter than the blossom. *Leaves* broad strap-spear-shaped, sitting, cottony; the whole plant downy; cal. segments oblong egg-shaped. *Bloss.* marone colour; *valves* fringed. *Road sides, rubbish.* Bloss. June.

Use. It is succulent and somewhat mucilaginous, especially the root, which, for medicinal purposes, is preferred to the leaves. It is reported to be *deleterious*, and the dingy lurid appearance of the leaves, peculiar to poisonous shrubs of the narcotic kind, favours the opinion; nor are facts wanting to confirm it. A whole family, eating it by mistake for comfrey, severely experienced its ill effects. (*See Morrison Hist. Oxon. III.* 450.) Experience has not yet determined how far it may be employed as a medicine. Dr. Hulse is said to have prescribed a decoction of roots internally, together with a poultice of them, to *scrophulous tumours* with safety and advantage (*Ray, l. c.*). For its use in *coughs, hæmoptysis, diarrhœa, dysentery,* see *Schreckius, Diss. de Cynoglosso,* and *Woodville.* Both the root and the leaves have been suspected to possess *narcotic* properties, but some will not admit the fact: it was formerly kept in the shops as a *pectoral* and *narcotic,* but it is discarded from the present practice. Mr. Ray says, however, that Dr. Hulse used a decoction of the roots inwardly, and cataplasms of them outwardly, in *strumous* and *scrophulous* cases. Its scent is very disagreeable, and greatly resembles that of mice—*Withering.* Goats eat it; cows, horses, sheep and swine refuse it.

3. Symphytum. *S. officinale. S. consolida major. S. vulgare.*

Ang. Comfrey, common comfrey.

Gen. Desc. Bloss. funnel-shaped, bellying towards the top; mouth closed by hollow radiate valves, having an open hole on the outside near the border; nuts 4, perforated.

Spec. Desc. *Leaves* egg-shaped, decurrent. *cal.* close. *Bloss.* yellow-white; tube as long as the calyx; *valves* spear-shaped; flat, covering the anthers; edge studded with small shining glands. *River-banks, wet ditches.* Bloss. May.

There is a variety with red flowers.

Use. The root of this plant is a powerful *agglutinant,* good in the *fluor albus.—Hill.* The root is very mucilaginous; and being rather superior to the althæa, and more easily obtained, may be usefully substituted in its place, for

for the general purposes of an *emollient* and *demulcent*. *Woodville.* Dr. Cullen says, there is no reason why, while mucilaginous matters are retained in our lists, symphytum should be omitted. It may be of service, as alleged, in *diarrhœas* and *dysenteries.* The roots are glutinous and mucilaginous: a decoction of them is used by dyers, to extract the colouring matter of gum lac. The leaves give a grateful flavour to cakes and panada; and the young stems and leaves are excellent when boiled. The particles of the *pollen* appear in the microscope like two globules united together. Cows and sheep eat it; horses, goats, and swine refuse it. *Linn.*

4. Borago. *B. officinalis. Buglossum latifolium.*
Ang. Common borage.

Gen. Desc. Bloss. wheel-shaped; mouth closed with rags; nuts 4, imperforated.

Spec. Desc. *Leaves* alternate, egg-spear-shaped, rough, as well as the stems, with white prickly hairs. *Bloss.* blue, white, or flesh colour, segments spear-shaped; *anthers* black; *filaments* above the insertion of the anthers, cylindrical, dark blue; below, thick, brown, glandular. *Walls, rubbish.* Bloss. June, August.

Use. The flowers have been termed *cordial,* and hence formerly much recommended in *melancholia,* and other affections of the nervous system. But as they possess neither pungency, warmth, nor fragrance, and as no saline matter appears to be contained in the flowers, any advantage supposed to be derived from a vinous infusion of them, can only be attributed to the menstruum. The leaves abound with a saltish juice, which on being boiled a sufficient time, forms crystals of nitre; hence the plant may be inferred to possess *refrigerating* and *aperient* virtues. *Woodville.*— The juice of this plant affords a true nitre. *See Experim. of M. Marggraff, Mem. de Berlin,* 1747, *p.* 72.—It is now seldom used internally, except as an ingredient in cool tankards for summer drinking; though the young and tender leaves are good in salads, or as a pot herb—*Withering.* A horse eat it.—*Dr. Stokes.*

5. Primula. *P. vulgaris. P. veris acaulis. P. sylvestris.*
Ang. Primrose.

Gen. Desc. Bloss. tube cylindrical, mouth open, stem within the tube; caps. 1-celled, cylindrical, many-seeded, opening with ten teeth; summit a knob.

Spec. Desc. *Leaves* wrinkled, toothed; border of the blossom flat; leaf-stalks, when fully grown, longer than the

the leaves. *Woods, hedges, thickets, heaths.* Bloss. April, May.

Use. Of the roots, taken up in Autumn, and dried, a drachm and a half, according to Gerard, operates as a strong but safe *emetic* Silk-worms may be fed with the leaves of the primrose. *Trans. Soc. of Arts.* Sheep and goats eat it; cows are not fond of it; horses and swine refuse it. *Linn.*

6. Primula. *P. officinalis.*

Ang. Cowslip. Cowslip primrose. Pagils. Paigles.

Gen. Desc. As above.

Spec. Desc. Leaves wrinkled and toothed; *stalk* many-flowered. *Blossom* sweet scented, full yellow, an orange blotch at the base of each segment contracted at the middle of the tube, where the stamens are inserted; flowers drooping; border of blossom concave. *Meadows, pastures, in loamy or clayey soil.* Bloss. April, May.

Use. The leaves are sometimes eaten as a pot-herb and in salads. The blossoms are used for making cowslip wine. The root has a fine scent like anise—*Withering.* Silk-worms are fond of the leaves and flowers. *Trans. Soc. Arts.*

7. Menyanthes. *M. trifoliatum. Trifolium paludosum. Acopa. M. palustre tryphillum. Trifolium fibrinum.*

Ang. Marsh trefoil. Water trefoil. Marsh cleaver. Trefoil buckbean.

Gen. Desc. Bloss. hairy or fringed; nect. 5, at the base of the germen. Summit 2 lobed; caps. 1 celled.

Spec. Desc. Leaves by threes, spear-egg-shaped. *Bloss.* pinky and white, in a spike-like bunch, a floral leaf at the base of each pedicle; bloss. segm. entire at the edge, shaggy on the upper surface. One of the most beautiful of our native flowers. *In ponds and pits frequent.* Bloss. June, July.

Use. An infusion of the leaves is extremely bitter, and is prescribed in *rheumatisms* and *dropsies.* It is sometimes given to destroy *worms*—*Withering.* The blackness manifested by adding a solution of green vitriol to the juice, or to a strong infusion of the leaves, is a sufficient test of its *astringency*; while a drachm of the powdered leaves seldom fails to produce purging, or vomiting; so that in common with the tonic properties of a bitter, it seems also to possess a considerable share of medicinal activity. Its success in a number of chronic diseases is mentioned by various authors, as in *scurvy, dropsy, jaundice, asthma, periodical*

periodical head-achs, intermittents, hypochondriasis, cachexia, obstructio mensium, rheumatism, schrophula, worms, gout. In gout, Dr. Boerhaave was relieved by drinking the juice mixed with whey: and Dr. Alston says, that this plant had remarkable effects in the gout, in keeping off paroxysms; though, he adds, not to the patient's advantage. Bergius confines the uses of this plant within narrower limits, and by later writers they have been still farther contracted. In Lewis's Mat. Med. (*by Dr. Aikin,*) it is said, "the leaves of buckbean have of late years come into common use as an *alterative* and aperient, in impurities of the humours, and some hydropic and rheumatic cases;" and as an active and eccoprotic bitter, we should suppose them not ill adapted to supply the want of bile in the *primæ viæ,* and thus infer their use in protracted jaundice and other biliary obstructions. Dr. Cullen had several instances of their good effects in some cutaneous diseases of the herpetic and seemingly cancerous kind. The leaves may be given in doses of ℈i. to ℈ij. two or three times a day, but a strong infusion of them is perhaps to be preferred, and with delicate stomachs it may be necessary to conjoin a grateful aromatic. These leaves impart their properties both to watery and spirituous menstrua—*Woodville.* This plant is regarded by the northern Europeans as a certain panacea for the cure of all diseases—*Ray.* The Highlanders in Scotland esteem a tea made of the leaves, as a good strengthener for a weak stomach—*Lightfoot.* In the north of Europe this plant has been used, in a scarcity of hops, to bitter ale instead of them, two ounces being equal to a pound of hops, so extremely bitter are they; yet Linnè observes, that in Lapland the poorer people make bread of the powdered roots mixed with meal, which, however, he acknowledges to be very unpalatable food. Some people smoke the dried leaves. As a proof of its good effects in dropsies, it has been said, that sheep being forced to eat it, have been cured of the rot by it—*Woodville.* But it appears from the Upsal experiments, that sheep will seldom eat it; goats eat it; cows, horses, and swine refuse it—*Withering.*

8. Anagallis. *A. arvensis.*

Ang. Pimpernel, Male pimpernel.

Gen. Desc. *Bloss.* wheel-shaped, caps. cut round, 1 cell, many seeds.

Spec. Desc. *Leaves* egg-spear-shaped. *Stem* trailing. *Calyx,* segments spear-shaped; *Bloss.* scarlet, sometimes blue. *Corn-fields, sandy places.* Bloss. May, Aug.

Use.

Use. This plant is esteemed an *alexipharmic* and *sudorific*, but it is very little used. *Hill.*

9. Convolvulus. *C. sepium.*

Ang. Great bindweed.

Gen. Desc. Bloss. bell-shaped, plaited. Nect. surrounding the base of the germen. Summits 2; caps. 2 or 3 celled, 2 seeds in each.

Spec. Desc. *Stem* twining. *Leaves* arrow-shaped, lopped at the base, edges brown. *Fruit-stalk* 4-cornered, 1 flower. *Bloss.* white; floral leaves 2, close to the cup. *Moist hedges.* Bloss. July, Aug.

Use. The inspissated juice of this plant, in doses from 20 to 30 grs. is a powerful drastic *purge.* Scammony is the inspissated juice of the root of a foreign species of convolvulus, but so much resembling this, that they are with difficulty distinguished. Though an acrid purgative to the human race, it is eaten by hogs in large quantities without any detriment. Sheep, goats, and horses eat it; cows refuse it.—*Withering.*

10. Convolvulus. *C. Soldanella.*

Ang. Scottish scurvy grass. Sea colewort. Sea bindweed.

Gen. Desc. *As above.*

Spec. Desc. *Stem* not twining, in open ground short, lying flat, and taking a semicircular direction; among bushes growing to some length embranched, bearing no flowers. *Leaves* kidney (sometimes heart) shaped. *Fruit-stalks* with 1 fl. *Bloss.* red. *Leafstalks* long. *Sea shore.* Bloss. July.

N. B. It grows at a distance from the sea, but not above half its usual size.

Use. Of the juice, half an ounce, or a drachm of the powder, is an acrid *purge.* The leaves applied externally are said to diminish dropsical swellings of the feet.—*Withering.*

11. Campanula. *C. rapunculus.* *Rapunculum.*

Ang. Rampions.

Gen. Desc. Bloss. bell-shaped. Filaments broad and arched at the base. Summit 3-cleft. caps. beneath; 3-celled, opening at 3 lateral holes.

Spec. Desc. *Leaves* waved, smooth, narrow; root-leaves spear-oval; *panicle* compact; fruit stalks by threes. *Stem* angular, rough, with milky juice. *Bloss.* large, purplish blue, nearly upright, not expanding; segments marked each with 3 red lines. *Hedge banks, fallow fields.* Bloss. July, August.

Use. The roots are often eaten raw in salads, or boiled in the manner of asparagus. In gardens they are branched. The shoots of the c. latifolia, the beauty of whose flowers procures it a place in gardens, are boiled, the skin being stripped off, and eaten as greens about Kendal; it abounds also with milky liquor.—*Withering.*

12. LONICERA. *L. xylosteum.*

Ang. Upright honeysuckle.

Gen. Desc. Bloss. one petal, tubular, irregular; berry beneath, one to three-celled; many-seeded.

Spec. Desc. *Fruit-stalks* two-flowered, opposite, axillary. *Berries* distinct. *Leaves* very entire, pubescent, mostly egg-shaped, in opposite pairs, three pair on each branch, soft, and cloth-like to the touch. *Blossom* yellow, upper lip four-cleft, lower lip entire, strap-shaped. *Filaments* woolly. Shrub six or eight feet high. BLOSS. May.

Use. Linnæus says this plant makes excellent garden hedges in a dry soil; and that the clear parts between the joints of the shoots are used in Sweden as tubes for tobacco pipes; the wood being very hard makes teeth for rakes, &c. It is rare, though certainly a native, in England.

13. VERBASCUM. *V. thapsus. V. album. Tapsus barbatus.*

Ang. Great white mullein. High taper. Cow's lungwort. Lady's fox glove.

Gen. Desc. Bloss. wheel shaped, nearly-regular; caps. two-celled, two-valved, many seeded.

Spec. Desc. *Leaves* decurrent, cottony on both sides. *Stem* unbranched, from four to six feet high. *Summits* globular. *Flowers* in a long terminating spike. *Blossom* yellow, rarely white. *Dry banks, chalky or gravelly soil.* BLOSS. July.

Use. The leaves have an herbaceous, bittering, subastringent taste, but peculiar smell; on being chewed they discover a mucilaginous quality, and hence they are recommended as *emollients* both internally and externally; in the way of fomentation and cataplasm they are said to be an useful application to hæmorrhoidal tumors; and also for promoting the resolution or suppuration of glandular indurations; it has been recommended internally for catarrhal coughs and diarrhœas; Dr. Home found it successful only in the latter.—*Woodville.* In diminishing or stopping *diarrhœas* of old standing, or easing the pains of the intestines, Dr. Home found it useful; for the former pur-

pose

pose he advises a decoction, two ounces to a quart, of which he gave a quart every day, four ounces every three hours.—*Woodville.* It is used with advantage as an injection in tenesmus, and is often applied externally to the piles.—*Clin. Exp.* The flowers have also been used medicinally, being supposed to possess anodyne and pectoral virtues; but it is probable that no part of the plant deserves much consideration as a medicine.—*Woodville.* The seeds of this plant are said to intoxicate or stupify fish so that they suffer themselves to be taken out of the water with the hand.—*Bergius.* In the pulmonary complaints of cattle, it has been found of great service, and is used for consumptive cows in Norway. The down serves for tinder. Horses, cows, sheep, goats, and swine refuse it.—*Withering.*

14. DATURA. *D. stramonium. Solanum fœtidum. Tatula.*
Ang. Thorn apple.

Gen. Desc. Bloss. funnel-shaped, plaited; cal. tubular, angular, falling off with the blossom; caps. four-valved.

Spec. Desc. *Seed-vessel* thorny, upright, egg-shaped. *Leaves* egg-shaped, smooth, deeply indented. *Blossom* large, white, sometimes purplish. A large wide-spreading plant, native of America, but naturalized. *Rubbish, dunghills.* BLOSS. July.

Use. An ointment, prepared from the leaves, gives ease in external inflammations and *hæmorrhoides.* The Edinburgh College directs an extract to be prepared by evaporating the expressed juice of the leaves. This has been given with advantage in cases of convulsions, epilepsies, mania, especially that succeeding child-birth.—*See Woodville.* Out of fourteen epileptic patients at Stockholm, eight were cured, and five relieved, by Dr. Obelius; the dose two to sixteen grains a day. This plant has been long known as a powerful *narcotic poison;* numerous instances are recorded of its deleterious effects, especially the seeds; which being taken internally have produced madness, tremors, swelling, itching, inflammation.—*See Med. Com. i. 368, iii. 22. Woodville, &c.* All parts of the plant possess a narcotic power, but the seeds are the only part of whose fatal effects instances are recorded; their soporiferous and intoxicating qualities are well known in the East, and are said to have been frequently converted to the most licentious and dishonorable purposes.—*Haller, Lindenstolphe.* By holding this plant to the nose for some time, or sleeping in a bed where the leaves are strewed, giddiness and

 stupor

stupor have been produced.—*Stork*. Externally the leaves of stramonium have been used as an application to inflammatory tumors and burns.—*Gerard*. Horses, cows, goats, and sheep refuse it.

15. Hyoscyamus. *H. niger. H. flavus. H. vulgaris.*
Ang. Henbane. Black henbane.

Gen. Desc. Blossom funnel-shaped, blunt, irregular; stam. leaning; caps. with a lid, two-celled; seeds many, kidney-shaped.

Spec. Desc. *Leaves* embracing the stem, indented. *Flowers* sitting. *Blossom* tube white, middle deep purple, border pale yellowish brown, veined with purple; anthers and style deep purple. The whole plant woolly and clammy, with a strong peculiar odor. *Villages, road sides, rubbish.* Bloss. June.

Use. Henbane is a powerful narcotic poison, and many instances are recorded of its deleterious effects; from whence it appears, that any part of the plant taken in sufficient quantity is capable of producing the most alarming and terrible symptoms. See in *Phil. Trans. vol. xl. p.* 446, an account of the dreadful madness occasioned to nine persons from eating the root, attended with the remarkable circumstance that after their recovery for some days, all objects appeared bright red. See also for the effect of the seeds, *Phil. Trans. vol. xxxviii. p.* 99. And of the leaves boiled in broth,—*Ibid. vol.* 47. A few seeds of the henbane have been known to deprive a man of his reason and the use of his limbs.—*Lightfoot*. Dr. Smith however says, that he has often eaten the seeds with impunity.—*Withering*. Haller relates the contrary of a companion of his.—*Stirp. Helv. n.* 580. It is probable that the powerful qualities of this plant may under proper management be used with good effect in medicine; it was well known to the ancients and esteemed as an anodyne, but was laid aside till Baron Stoerck published cases of different diseases, in which extract prepared from the juice was found to be an efficacious remedy; such as internal spasms and convulsions, palpitations of the heart, madness, melancholy, epilepsy, inveterate head-achs, hæmoptysis. It has been found to produce sleep more powerfully than opium; and as it possesses a laxative quality, may be useful where the astringency of opium renders the use of it liable to objection. This medicine has not always been found equally successful, (Greeding, Cullen, &c) but experience proves it to be an useful anodyne.—*Woodville*.

The

The leaves are said to have been applied with advantage externally, in the way of poultice, to resolve scirrhous tumors, and to remove some pains of the rheumatic and arthritic kind. The smell of the henbane is peculiar, and the bruised leaves emit an odor like that of tobacco; this is stronger if the leaves are burnt, and they sparkle with a deflagration resembling that of nitre, but to the taste they are mild and mucilaginous. It is poisonous to dogs and birds; but horses, cows, goats, and swine are not affected by it.—*Woodville.* Scattered about a house it is said to drive away mice. The Edinburgh College order the expressed juice to be evaporated to an extract, which may perhaps, in that state, be advantageously joined with opium, if costiveness is to be avoided; the dose is from half a scruple to half a drachm. Goats are not fond of it. Horses, cows, sheep, and swine refuse it, though sheep will sometimes eat it when young.—*Withering.*

16. ATROPA. *A. belladonna. Belladonna trichotoma. Solanum lethale.*

Ang. Deadly nightshade. Dway berries. Deadly dwale.

Gen. Desc. Blossom bell-shaped; stam. distant; berry globular, two-celled.

Spec. Desc. *Stem* herbaceous, zigzag, two or three feet high. *Leaves* egg-shaped, entire. *Bloss.* dark purple with a yellow base, and greenish red outside. *Berry* green, changing to red, and black when ripe. *Hedges, among lime-stone and rubbish.* BLOSS. June, August.

Use. This plant has long been known as a strong narcotic poison, and though the berries are less powerful than the leaves, we have many instances of their fatal effects, especially upon children, who have been allured by their beautiful appearance and sweet taste; they are recorded by a great variety of authors; and this is supposed to be the plant alluded to by Shakspeare, who makes Banquo say,

> "Or have we eaten of the insane root,
> Which takes the reason prisoner?" MACBETH.

For the dreadful symptoms produced, (vertigo, thirst, madness, convulsions, death,) see Dr. Woodville, l. c. Vinegar drank liberally has been found efficacious in obviating its effects, but evacuations should always be first promoted.—*Woodville.* The fresh leaves have been used externally with success to discuss tumors of the breasts of the scirrhous or even cancerous kind; and Dr. Graham says he found great benefit from a poultice made of the

roots boiled in milk and applied to hard ill-conditioned tumors and ulcers.—*Med. Comm. vol. i. p.* 419. Their good effects in this way at length induced physicians to employ them internally for the same disorders; but though they have often been found a serviceable and important remedy, their success has not always been equal. Dr. Cullen however adduces several instances of its efficacy in the cure of cancer and scirrhosity. The sensible effects of the leaves, taken medicinally, are usually by the skin, the urinary passages, and sometimes by stool. Its operation is so uncertain that the proper dose can with difficulty be ascertained; six grains is a very large dose. Of the berries, successfully employed by Gesner, &c. as an anodyne in dysenteries, a small spoonful of a syrup of the juice was the dose given. The root has the same qualities, but less virulent—*Woodville.* It appears from a Case related by Ray, that where the skin is broken, the external application of the fresh leaf is attended with considerable danger, —*Ray Hist. Plant.* 680. A large glass of *warm vinegar* taken immediately after eating the berries will prevent any bad effect.—*Lightfoot.* The juice of the ripe berries stains paper of a beautiful and durable purple.—*Withering.*

17. Solanum. *S. dulcamara. S. scandens glycy-picros, Amaradulcis.*

Ang. Woody nightshade. Bitter-sweet.

Gen. Desc. Bloss. wheel-shaped. Anthers a little united; two holes at the top of each. Berry two-celled.

Spec. Desc. *Stems* smooth, rather shrub-like, zigzag, twining. *Leaves* egg spear shaped, the upper l. sometimes halberd shaped. *Flowers* in tuft-like bunches, purple, with two green spots at the base of each segment; sometimes flesh colour, rarely white. *Berries* two-celled, scarlet. *Moist brakes, hedges, sides of ditches.* Bloss. June, July.

Use. The roots and stalks, upon being chewed, first cause a sensation of bitterness, which is soon followed by a considerable degree of sweetness; hence the name of bitter-sweet. The berries have not yet been applied to the purposes of medicine, but they seem to act powerfully upon the primæ viæ, in exciting violent vomiting and purging; thirty were given to a dog, which soon became mad, and died in three hours, when, on his being opened, the berries were found in his stomach unchanged by digestion. The *stipites* or young twigs, are directed for use in the Edinburgh Pharm. either fresh or dried, allowance being made for the diminution of its powers in drying; they should be gathered in Autumn. The Dulcamara, though it

it does not possess the narcotic qualities of other nightshades, is however admitted to be a medicine of considerable efficacy. Murray says that it promotes *all the secretions,* in which Bergius seems to coincide.—*Mat. Med.* 131. Haller observes, that it partakes of the milder powers of the nightshade joined to a resolvent and saponaceous quality. It has been recommended in diseases extremely various; Bergius confines it to *rheumatismus, et retentio mensium et lochiorum.* From the experiments of Razoux and others, it appears to have been used with advantage in some obstinate cutaneous eruptions.—*Woodville.* It is said by Boerhaave to be a medicine far superior to china and sarsaparilla as a sweetner and restorative. Linnæus says, an infusion of the young twigs is an admirable medicine in *acute rheumatisms, inflammations, fevers,* and *suppression of the lochia.* In *asthma* it was found very efficacious by Dr. Hill; and Dr. Hallenberg has advised it in *ischiatic* and *rheumatic* pains, *jaundice, scurvy,* and *lues venerea.* He (Linnæus also) directs a pint of boiling water to be poured upon two drachms of the stalks sliced and dried; after standing half an hour it must be boiled fifteen minutes; the dose is two tea cups full or more, morning and evening. The stalks may be gathered early in spring, but better in autumn, as the sensible qualities are then strongest.—*Med. Comm.* The root has the smell of the potatoe. —*Dr. Beddoes.* Sheep and goats eat it; horses, cows, and swine refuse it.

18. Solanum. *S. nigrum.*

Ang. Common nightshade. Garden nightshade.

Gen. Desc. *As above.*

Spec. Desc. *Stem* without prickles, herbaceous, branched, angular. *Leaves* egg-shaped, toothed, angular. *Bunches* nodding, pointing two ways. *Fruit-stalks* lateral, midway between the leaves. *Blossom* white. *Berries* black. This plant is subject to great varieties; with us it is herbaceous, in southern countries woody and very hard. *Rubbish, dunghills, kitchen gardens.*

Use. The leaves infused in boiling water, and taken at bed time, from one to three grains, occasion a copious *perspiration,* increase the *secretion by the kidneys,* and generally *purge* more or less the following day. These properties render it capable of doing essential service in various diseases, if judiciously applied, as may be seen in *Mr. Gattaker's Observations on the internal Use of Solanum.* But its effects on the nervous system are so considerable, and yet so uncertain, that it must ever be administered

with the greatest caution. The leaves applied externally, abate inflammation and assuage pain.—*Withering.* This plant is faint and disagreeable to the smell, and possesses the deleterious qualities of the other nightshades in a very considerable degree, even its odor being so powerfully *narcotic* as to cause sleep. The berries are equally poisonous with the leaves, (*Wepfer De Cicut. p. 226*) and to poultry they are immediately fatal.—*Haller.* The leaves boiled, and eaten by a mother and four children, produced swellings of the face and limbs, followed by inflammation and gangrene, but the husband, who ate of it at the same time, found no consequent disorder. (*Rucker. Commerc. Noric.* 1731, *p. 372*). It is asserted by Mr. Bromfield, that in a dose of one grain it had a mortal effect upon one of his patients. It is however mentioned by Dioscorides, &c. as an esculent plant; and Guerin (*de Veget. ven. Alsatia, p.* 66) relates that he drank an infusion of fifteen grains without suffering; and that an epileptic patient took from half a drachm to two drachms of the expressed juice, without perceiving any narcotic symptom to follow; and a still larger dose, together with two drachms of the juice of the berries, being given to some soldiers, no other effect was produced than that of an increased quantity of urine. (*Murray, l. c.*) Externally it has been found useful as a *discutient* and *anodyne*, in various affections of the skin, tumefactions of the glands, ulcers, and disorders of the eyes; with the Arabians it is a common application to *burns* and *ulcers;* and Ray speaks highly of its effects in *indurations of the breast.* Mr. Gattaker has recommended, in a publication on the subject, its internal use in *old sores, scrophulous* and *cancerous ulcers, cutaneous eruptions,* and even in *dropsies;* one grain of the dried leaves, he says, infused in one ounce of water, sometimes produced considerable effect; in a dose of two or three grains it seldom failed to evacuate the first passages, or to increase sensibly the discharge by the skin or by the kidneys; and not unfrequently it occasioned head-ach, giddiness, dimness, and drowsiness.—*See Gat.* Mr. Bromfield however soon after declared, (see his *Account of English Nightshades*) that the cases in which he tried it, were much aggravated by it; and that its use is prejudicial and dangerous; Mr. G. renewed his assertion in *Essays on Medical Subjects,* in 1764, (*see Introduction and p. 38*)—*Woodville.* The flowers smell like musk. Horses, cows, sheep, goats, and swine refuse it.—*Withering.*

(To be continued.)

LETTER II.

Of Quacks and Empiricism.

Character I. Dr. Day.

FROM some fortuitous circumstance, or temporary bias, an ample fortune has been raised by a single nostrum only; and Schomberg's pill, which the late Dr. James procured from a poor German,* and sold under the denomination of James's powder, affords a proof, which the success of a water doctor has fully confirmed. If one specific shall become so productive, it might be concluded that by multiplying the number the product would be proportionally augmented; but to ensure success, it would require an extent of abilities, rarely found in an Empiric: It would be necessary to assume and support different characters, in order to maintain and extend the reputation of each respective specific; but to this versatile exertion Dr. Day proved adequate. He was born in Holland, though of German parents, of the name of Dies, which the Doctor has translated into the English synonism of Day, under which name he first made his appearance in London about 1775, when he kept an elegant equipage with two footmen in green livery; his dress was showy, with brilliant shoe and knee buckles, white silk stockings, and elegantly wrought clothes.

As it was impracticable for Dr. Day, however Proteus-like the various characters he assumed, to appear in each respectively at the same time, he kept Agents, little inferior to himself in artful delusion; Dr. Rock, Dr. Christie, &c. by whom, rendezvous were appointed for the reception of the credulous. Dr. Day himself then lived in Sherrard Street, Golden Square; but at the period I allude to, the name of Rock, who had previously resided with Mayersbach, was upon the door; at the same time he kept a quack warehouse at No. 3, James Street, Covent Garden; Dr. Christie was the bill sticker. Dr. Lantware was another agent, who was appointed to father his famous bill to promote abortion, marked No. 5; but if this did not succeed,

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* This occasioned a dispute between him and Dr. James; but the latter was a more expert writer. The former introduced one of his appeals in the public prints with this motto.

> "Let Dr. James say what he will,
> James's powder is Schomberg's pill."

succeed, a reference was given to the deluded females to consult a lady, who procured accommodations for privately lying-in, as appears by the bill, No. 6.

The originals are in my possession, but I think them so curious and valuable as to merit a place in your Journal.

"To the PUBLIC. (No. 1.)

"The famous *Sympathetic Powders*, which have done so many surprizing cures when all other remedies have failed. As they never can hurt the patient, and are so innocent that young children have been cured by them, the patient has no need of internal medicines, to overload and nauseate the stomach, or hurt the constitution. Every sort of distemper or disease whatsoever, may or will be cured by bringing or sending their morning's urine to the Doctor's house, in Sherrard Street, Golden Square, the third door from Shug Lane, No. 3 over the door, facing a perfumer's.

"The doctor is to be spoke with from nine till two every day, (Sundays excepted). He is also possessed of the most authentic testimonies of the many cures he has performed in the worst disorders. N. B. He cures fits and cancers without fail. Advice to the poor gratis."

"To the PUBLIC. (No. 2.)

"Lately discovered, a new and easy method of curing old standing coughs, consumptions, all disorders of the lungs, asthmatic hooping coughs, tertian and quartan agues, scorbutic and all sorts of eruptions of the skin, cancers, piles, rheumatism, and some other private diseases. Those who are afflicted with any of the aforesaid disorders, may and will be cured by bringing or sending their morning's urine to the Doctor's in Greek Street, Soho, the third door from Compton Street, No. 3 over the door, facing the George. By the doctor's new method, they will relieve in a few days, according to the disorder. He may be spoke with from ten till two every day (Sundays excepted). The doctor is possessed of the most authentic testimonies of the cures he has performed in the most inveterate disorders, and also those that were declared incurable by other gentlemen of the faculty. The Poor advice for nothing.

"N.B. He also cures all disorders of the eyes without fail."

(No. 3.)

"DOCTER CHRISTIE acquaints the public, that he continues disposing of, at the Physical and Mineral Warehouse, in Church Street, St. Ann's, Soho, the second house from

from Greek Street, next the Coach and Horses ale-house, and no where else, his anti-venereal treacle, well-known for curing the venereal disease, rheumatism, scurvy, old-standing sores, and breaking out of the skin, at three shillings per bottle, which, by many years experience, has never failed in curing the above mentioned disorders, without hindrance of business, or the knowledge of a bed-fellow; as it works off by urine, it is beyond a doubt superior to any medicine ever invented, in its certainty of performing a safe and easy cure. It is a convenient medicine for Seamen, Travellers, and Servants in places. Those unfortunate people of either sex, who have fallen into the hands of unskilful mechanics, who by getting a medicine call themselves doctors, and give out thousands of puffing bills, and practise on the unhappy people to sell their pernicious drugs, to get money, by keeping them months under a course of physic; let none of those of either sex despair of being cured, though the disease be of long standing.

" Advice gratis — No cure no pay — Genteel people of either sex may lodge and board in the doctor's house."

(No. 4.)

Is by Doctor Christie, and not greatly different from No. 3, but does not offer bed and board for both sexes.

" To the Ladies. (No. 5.)

" The female mixture, which removes all sorts of obstructions in certain cases of ever so old a date, with sore and swelled legs, shortness of breath, giddiness, and all the symptoms which attend a change of life, with ease safety, and certainty.

" *A caution to pregnant women.* As pregnancy is often mistaken for obstructions, whoever has reason to suspect herself with child, must not use this powerful mixture, as *it will certainly bring on a miscarriage.*

" It is sold at the Physical and Mineral Warehouse, in Church Street, St. Ann's Soho, the second house from Greek Street, next door to the Coach and Horses ale-house, and no where else, at half a guinea, and a guinea a bottle, with proper directions how to use it."

(No. 6.)

Is advertised " A Gentlewoman," who sells a mixture for 3 shillings a bottle to remove weaknesses, and concludes thus. " To the Ladies.

" N. B. Pregnant women may be accommodated according to their abilities, *where privacy is required.* No. 3 James Street, Covent garden."

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One might have imagined, that in a well regulated city, the magistrates would not have suffered the quack bill, No. 5, to have been circulated with impunity; as infanticide has been amenable to law in every civilized nation. Whoever contemplates the Institution of the Royal College of Physicians, would have concluded that its salutary interference would have been laudably exerted upon such a gross insult to virtue, and open violation of law; but fortunately for Dr. Day, he was not a licentiate, but merely a German adventurer; and it has been principally against the former, that its vengeance has been exercised.

It ought, however, to be recorded, in extenuation of Dr. Day, that his medicine to promote abortion, was an harmless deception, although it was found that the demand for it was so great, as to have enabled him to pocket as much as ten guines a day; till the deluded females found it inactive, and consequently not injurious to their health; and perhaps, by adopting this means of deluding them, he saved them from attempting some really dangerous expedient; for I believe that Dr. Day, as it has been observed, never administered any pernicious means for the purpose of inducing abortion, however censurable he might have been, in imposing upon the weakness of the public; he was naturally good tempered, and facetious, which led him to laugh at, rather than correct, their credulity; and he might certainly be considered as very officious and gallant, in gratifying the wishes of the female sex, in not only offering them a bed as well as the other sex, but likewise a remedy, to rid them of an unwelcome burthen; and in case of its failure, affording them private apartments for their easy accommodation. It was, hence, doubly his interest, to prevent infanticide; for in addition to his abortive mixture, he had the profits of an accoucheur, and the hire of chambers suitably to the rank and finances of the victim of double deception, to avail himself of.

I have not seen the doctor for some years past, but I am informed that he resides at the house from whence one of his quack bills is dated, and that he claims the respect of many of his neighbours, as a private individual which induces me to think that he merits a place in your Journal, prior to Dr. Griffenbergh and Dr. Mayersbach, who will be introduced in the next letter of

Your Constant Reader,

London, June 30, 1804.

IETROS.

To Dr. BRADLEY.

SIR,

IT must give every lover of his profession sincere pleasure to find, that those diseases once called the *opprobria medicorum* are now boldly and candidly investigated. If we are still undecided as to remedies, we may at least not be afraid to enquire after laws; and when these are established, we have rational grounds to proceed on.

Since the days of Sydenham, physicians seem to have been afraid of Gout. Some unfortunate events which followed what were considered as cures, very much increased the apprehension of interfering with that formidable enemy. The utmost that has been usually ventured on was to protect the stomach. Dr. Cadogan indeed exhibited a bolder kind of practice; but his treatment was for the most part so indiscriminate, his promises to his converts so unguarded, that his theory soon fell into discredit.

As soon after my arrival at Madeira as I could avail myself of that leisure which a new situation afforded me, a fit of the gout induced me to examine my papers on that subject, and to recollect all I had observed of the disease. And here I can bear testimony to Mr. Wadd's claim to the use of cold water at least ten years ago, and to that of his late father in law, Dr. Waymann, near twenty years before him. When all my materials were prepared and almost arranged for the press, I found the disadvantage of living so far from the intercourse of men engaged in experimental enquiries. The analyses made of gouty calculi was in direct opposition to one part of my theory, and of course determined me to lay aside my work. It however gives me much satisfaction to find, that the practice in that disease is becoming every day more bold; and that even so illustrious a character as Heberden has sanctioned bleeding in acute gout. Those who peruse Sydenham with care, will find he is by no means chargeable with the practice which so generally obtained after his time. On the contrary, there are cases in which he advises bleeding; and it was his constant custom occasionally to purge himself.

These remarks are intended only to introduce a work, which, as far as I know, has not hitherto appeared in England. It is the production of one who holds the important office of *Archiatros of Portugal*, and containing some valuable facts which he witnessed on himself as well as others,

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is particularly entitled to notice. The work is written in Portugueze and Latin. The former, a language little cultivated by the profession; and as the liberality of the times, and the miscellaneous contents of your Journal, encourage the diffusion of knowledge, the following translation from the two languages may not be inconsistent with your plan.

"*Observations on the safe and efficacious Use of Peruvian Bark for the Cure of Gout, by* FRANCISCO TAVARES, *First Physician of the Kingdom of Portugal, &c. &c.*

That celebrated investigator of the nature of diseases, Sydenham, long since suspected that the Peruvian bark, whose virtues exceeded most other then known articles in the Materia Medica, might hereafter be found useful in gout, which had hitherto withstood the force of so many remedies. Boerhaave, and his illustrious commentator, seemed to assent to this opinion; but without adding any thing of their own, contented themselves with a respectful reference to the English Hippocrates. Though the celebrated Held, in the Ephemerides of Natural Curiosities, left several important facts concerning the safe use of this remedy in gout, yet unfortunately they stand unsupported by any other authority; on this account, Murray not having prosecuted the enquiry experimentally, dismisses the article with a few words on the virtues of bark in the gout.* Perhaps cautious physicians, dreading the fatal effects of the imprudent use of bitter remedies, which have been handed down to us from the ancients, were fearful of trying bark, and willing to leave the subject untouched.

It has been the fate of the most valuable remedies to be most opposed. Sometimes the ignorance of physicians, and their want of diligence in attending to the exhibition of these medicines, or their impatience in being disappointed in their first and perhaps ill-directed experiments, have been the cause of this opposition. I am prepared to expect the same opposition to the use of bark in the gout, though for more than eight years I have experienced the advantage of it in my own person, and have confirmed this experience by general practice.

On this occasion I feel it a duty to express publicly my acknowledgments to Sen. Bento Joachim de Lemos, once my pupil, but now Professor of Medicine in the University of Coimbro. Urged by our ancient friendship, he communicated

* Appar. Medic. tom. i. p. 603.

municated to me his observations, the source of which will soon be related, and entreated me by repeated letters to make use of bark, to lessen the violent and frequent attacks of a disease which had tormented me for sixteen years.

I confess that for some time I neglected the advice and wishes of my friend, nor shall I conceal that I was fearful of the practice, recollecting the cautions of Galen, Celsus, Aurelianus, Gaubius, Van Swieten, Cullen, and others, against bitter remedies in the gout. Thus divided on one side by terror, on the other by the well known abilities of the Professor, and my confidence in his probity and friendship, I willingly reflected that the bark was not only free from the bitterness of the once celebrated Portland powder, but that it was also serviceable in some diseases which have a strong analogy with gout, and that it even possessed properties which promised relief to that complaint. From revolving all these circumstances, I flattered myself, that without a perfect cure, I might at least lessen the violence and frequency of the paroxysms, advantages which my fellow-sufferers only can justly appreciate.

Under this persuasion, which has been confirmed by experience, I have spared no pains to establish the usefulness of the remedy by every authority I could collect; I shall therefore first relate the observations of my friend, explain with candour what I have experienced in my own case, and, lastly, since, to use the words of Celsus, the facts have not been discovered after, but have led to the theory, I have thought it right to add the reasons for this agreement, the necessity of the practice, and an account of such remedies as have probably assisted the use of the bark.

Case I. giving an account of the circumstances which led to the discovery.

Professor de Lemos being called to visit a Cistercian monk in the gout, was requested either to cure him or to cut off his legs. To this my friend briefly replied, that it was as difficult to do one as it was easy to do the other, and that he could prescribe nothing but time, patience, and diet, with a very few remedies to be cautiously exhibited during the paroxysm. The village surgeon, scarcely deserving the name of a barber, was present, and had promised to cure the patient. He smiled at the prudence of the Professor, and again renewed his promise. Dr. Lemos took leave of his patient, and was soon afterwards consulted

sulted concerning a purge, which the barber had prescribed for their patient. This consisted of half a drachm of rezin of jalap, the same quantity of scammony mixed with half an ounce of diacodium, for a single dose. The Professor with difficulty suppressing laughter, astonishment, rage, and impatience, at length sufficiently composed himself to reply, that a fourth part of such a dose would be a dangerous remedy. What quantity the monk took, never was ascertained; but after the purge a drachm of powdered bark was exhibited every hour, so that in the night and day, two ounces were taken. Dr. de Lemos renewed his visit, expecting to find the monk in a worse state than before; but what was his astonishment to find him walking on crutches, and two days after quitting his house. This fact suggested to him the exhibition of a purge consisting of ℥j or ℥jß of Epsom salt, giving in the mean time the bark in the above quantity and doses. Of the monk he never after could gain any intelligence.

Case II. The Rev. F. I. de T. director of the apothecary's shop at the royal hospital of Coimbro, about forty-six years old, fat and sedentary, having in the year 1796 suffered for ten days the first gouty paroxysm in his great toe, felt a repetition of the disease about three months afterwards. Prof. Lemos was consulted on the third day, and prescribed the purging salt and Peruvian bark in the manner above related. The pain was so much lessened, that on the following day the patient left his bed, and on the immediately succeeding day walked without difficulty. About a year after he had a fresh attack, and derived the same benefit from the same remedies. He continued free from the complaint for two years. As soon as the first symptoms of the paroxysm appeared, he took his purge, and afterwards only 3 drachms of powdered bark. From these, if he did not derive the desired effect, he at least found that his pains were not increased, and on the following day they yielded to 6 more drachms of bark. Hence it is evident, that to produce the desired effect, a large quantity of bark is necessary. From that time (1799) to 1802, he has felt no return, except that recovering from a fever he found a pain and swelling in his knee, which the bark relieved.

Case III. I. A. fat and sedentary from his occupation, from 45 to 50 years of age, was for many years gouty, the paroxysms continuing never less than twelve or fourteen days, and sometimes longer. Being treated according

ing to the above plan, in the three last paroxysms, though his stomach would not bear such repeated doses of bark, yet he always obtained relief from his pains, nor did any one of these fits detain him longer than four days in the house. Though he was accustomed to suffer two attacks in the year, yet since the use of the bark he has been visited in the space of eight years with only the three above mentioned. This winter (1802) he has suffered much by the catarrhal disposition of the season, but has been free from gout.

Professor Lemos has many other cases, of which he kept no memoranda. I shall subjoin those under my own observation.

Case IV. I. da C. a shoe-maker, having gone through his first gouty paroxysm in his great toe, three weeks afterwards was attacked in the hand. He took the bitter salt and bark in the manner described, and the pain ceased within twenty-four hours. By my advice he discontinued the use of the bark. One month afterwards, feeling a troublesome sensation in his foot, he returned to the remedy, and after the third dose the uneasy sensation ceased, the motion was free, and his health restored.

Case V. The author's own. At the age of 33 years, being advanced to the rank of public Professor in ordinary in the University of Coimbro, the close application and confinement such an office required, soon brought into action that hereditary disposition to gout which I had derived from my father, and which I had probably hitherto only prevented by muscular exercise. After a severe rheumatism, I suffered for the first time (1786) acute gout in my instep; this continued about fifteen days, after which I remained well for a twelvemonth. In the following spring, however, the paroxysm returned, and two years afterwards, with the same regularity. After this last paroxysm I was teased with want of appetite, and sometimes vomitings, which I attributed to indigestion, being accustomed to lecture every evening soon after dinner. For this complaint I repaired to the Caldas, drank the waters, and remained two years free of gout. At the close of 1790 the gout returned, and again in the following spring. In the succeeding year, 1792, the fit occurred in an advanced state of the summer; it was preceded by a bilious fever, and continued a month. Though at this time, by orders from the Superior of the University, I had changed my plan of life from sedentary science to active employment, yet

yet at the end of two years the gout returned with as regular a paroxysm as before.

Hitherto, my feet only had suffered; but in the year 1797, for the first time, the disease passed from my feet to my knee, and from that time I do not recollect a single paroxysm, which after three or four days did not take the same course. Nor were the attacks as before, confined to once in a year: but by the recurrence of a second attack the parts were during the intermediate space painful, and unfit for their necessary functions. I now became dispirited; and although my diet was strictly regular, yet frequent indigestions occurred whenever I omitted muscular exercise, either from the duties of my office or merely from melancholy. I had suffered the longest paroxysm of all in the year 1800; and at length, on the 11th of September, 1801, having slightly strained my left foot, it became the seat of gout; afterwards my right foot, and alternately my knees and feet, for three months. On the decline of the paroxysm, weary of so much suffering, I took a solution of rezin of guaiacum in gum arabic, syrup, and cinnamon water, from which I derived relief sooner than in my former paroxysms. The effects of this remedy were a gentle perspiration during the night, and one or two bilious stools in the day: and though I did not acquire the perfect use of my limbs, I could walk with a crutch.

On the 28th of October, from a very slight cause, my feet were attacked, and my knees were more painful than at any former period. On this occasion I had reason to believe that the solution of guaiacum shortened the period, for in the space of four weeks I found myself restored. At the end of that time, without any previous notice, the joint of my right toe became painful but very slightly, my knee began to be affected in the same way, and my leg to swell. The weather was intensely cold and damp, the wind blowing furiously, and varying from north to south. There was also an epidemic catarrh, the effects of which I felt with pain in the head. At length, on December 27, at two o'clock in the morning, commenced an acute pain in my foot, and my knee was relieved.

It was now that the recollection of my recent severe sufferings reminded me of the advice of my friend. I began the bark, and in thirty-six hours took 18 drachms of the powder; no inconvenience in my stomach followed; no increase of pain, no incapacity to move, though my foot was firm on the ground; no sensation of weight in my leg, nor any of that inquietude or impatience peculiar to gouty subjects.

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On the 29th of December, by the assistance of a crutch I could fulfil my necessary duties, moving indeed slowly but without perceiving any weight in my foot, or swelling of my leg. I laid aside the bark for two days, and after this I took fourteen drachms, and in eight days swallowed four ounces, remaining only two days at home. Aware that the bark in large doses usually purged me, I omitted the previous dose of Epsom salt. In this I was not mistaken, for after the third dose of bark, followed three copious bilious evacuations. For this reason, within the twenty-four hours I took ten drachms. I now laid aside the bark for four days more, and afterwards took two drachms each day, or sometimes, instead of the powder, took a mixture of bark and wine, varying the form, that the remedy might not lose its effect. For some time a slight pain continued, for which the cold and wet weather were sufficient to account; however, I never failed to go abroad morning and evening; and excepting the uneasiness that attended first leaving my bed, could accomplish the whole with little or no difficulty. But this pain, however slight, continued even to the month of February (1802) which induced me to repent of my obstinacy in not purging myself freely at the beginning of the paroxysm; I therefore took 20 grains of jalap and 8 of calomel. After this the pain almost entirely ceased, nothing remaining but some degree of debility, which I attributed to the frequent repetition of paroxysms and the want of exercise in the open air, which the inclemency of the season prevented.

From the 22d and 24th of February, being clear days, with a heat equal to that of Summer, I took the exercise of riding. The following days were cold and cloudy with a north-east wind, which I have reason to remember, for without any other cause to which I could ascribe it, I was attacked by a fresh pain in my great toe at two o'clock in the morning. I have no doubt that it would have increased, if I had not instantly had recourse to what I now considered a sheet anchor. Scarcely had I taken the third drachm of bark when the pain became milder, though I had prepared myself to expect a violent paroxysm, having already found the veins of my foot and leg tumid, an erysipelatous efflorescence, swelling, spasmodic contractions of the muscles of the leg, and cramp in the foot, accompanied with the usual impatience and inquietude, fever, shiverings, and all these exasperated by a fifth attack of the catarrh before mentioned. The pain was so much relieved that I could rest on my foot and walk out, nor did any

any other of the symptoms remain. On the following days, though very cold, I continued to go out, halt indeed in my first steps; but after a few minutes the very act of walking almost fitted me for it. On the first day I took a drachm of bark every hour till I had consumed an ounce; after this, passed the night well, sleeping soundly, my foot being so easy that no inconvenience was felt excepting from some aukwardness in its position. On the following days I took another ounce of bark, and afterwards desisted. I recovered my health in the beginning of March, excepting only a trifling swelling; and so sensibly am I impressed with the value of this remedy that, or the future, I shall never fail to have recourse to it, or to recommend it to others.

Case VI. Whilst preparing these sheets, I communicated the importance of bark in gouty cases to my worthy friend, Senr. Norberto Antonio Chalbert, Surgeon to the Royal Camera, a man of well known reputation, and of no common erudition or prudence. A few days after he was sent for by an old gouty subject in an acute paroxysm. This patient had frequently been under Senr. Chalbert's care, and no former remedies he could suggest ever lessened the fit, so as to reduce the period within the space of a month. He prescribed however a purge on this occasion, and in the afternoon began with the bark in the manner above described, continuing it for the two following days till two ounces were consumed. On the third day the patient thought himself well enough to leave his house, without any considerable uneasiness.

Case VII. F. Z. formerly a dancing master, fifty years of age, has been afflicted with gout from the age of twenty-five. For this reason his mode of life is sedentary; he is lean and full of vivacity, yet has usually two paroxysms in a year, which continue for three months or longer. In the beginning of January 1802, he had a paroxysm which lasted till March, and on the 18th of that month the disease attacked his feet with more violence than before, passed to the elbow, and thence to the right hand; again to the feet, the ancle, the heel, the *tendo* Achillis, and the thumb. On the 6th of April I visited him, and found the foot swoln near the joint with an efflorescence, and painful when pressed upon: the right hand had not yet recovered its size or free motion. I ordered an ounce of Epsom salt, from which he had an easy and copious evacuation. On the same evening I advised him to take half an

ounce

ounce of bark before midnight, as he assured me his stomach was equal to it: however, after the third drachm, he felt some repugnance. But with the quantity taken he slept soundly, contrary to his usual custom, and was free from pain. In the morning the motion of his feet was more free, and his hand in such a state as enabled him to write me a letter, describing his situation. After taking three drachms more on the same morning, his stomach became uneasy, and he vomited a small portion of the last dose. I proposed longer intervals between the doses. He took a drachm four times a-day, and though I could not promise him such speedy relief, I trusted that the efficacy of the remedy would not be interrupted by the too great sensibility of his stomach. Though he had not taken quite two ounces of bark, yet on the following day he was so far relieved from pain, swelling, redness, and difficult motion, that he could walk like a person in health, and take his exercise abroad. For the perfect establishment of his health I advised a cold infusion of bark for a few days; this his stomach bore without inconvenience.

Case VIII. Having bruised my knee near the patella I began to feel threatening of gout, the pain gradually increasing over the whole articulation. Having applied three leeches to the bruised part, I took half an ounce of bark, and in twenty-four hours found myself perfectly well.

I omit several other cases; those already related are sufficient to encourage any one who wishes to make trial of this remedy.

By what has been said, it is evident that the advantages of the proposed method consists in cleansing the primæ viæ by a powerful cathartic, as soon as the pain commences, and afterwards in exhibiting the bark in the dose of a drachm from hour to hour. For the two first days an ounce should be taken daily; on the four following, half an ounce each, increasing or lessening these quantities according to the judgment of a prudent physician.—Whether the bark is given in powder (which is always desirable) or in infusion or decoction, the quantity given must depend on the patient's stomach and other circumstances.

The Author's Reflections.

Whatever is worth the attention of the physician in his observations on gout, as to its nature, the progress of its paroxysms, or variety of symptoms, and also whatever has

been observed of the bark, all contribute to recommend the latter above all other remedies hitherto proposed in the cure of this disease. Let us view these propositions in order.

As to the nature of gout, all authors agree that debility of the viscera, hereditary or acquired, producing indigestions, incomplete assimilations, and various complaints arising from the same causes, and showing themselves under a variety of forms, at length terminate in gout. It is evident, that all those causes (of which no physician is ignorant, and which it is unnecessary here to enlarge upon) which may produce or excite this debility in a subject predisposed thereto; in short, whatever may injure the nervous energy, and induce disease arising therefrom, may likewise excite gout. Hence, according to the variety of subjects and external circumstances, the disease appears under its regular paroxysms, anomalous, atonic, misplaced, retrograde, earlier or later, at greater or less intervals, changing its form, whilst its nature continues the same.

The ancient physicians always kept in view, that in curing the gout, the strength of the viscera should be restored: all recommended during the interval of the paroxysms, tonic, bitter, and gently stimulating remedies, even so far as to propose proper condiments to be taken with the food, in order to assist digestion. Whatever may be handed down to us from Celsus, Aurelianus, Ætius, Aretæus, Galen, and others, as servicable in this complaint, are bitter remedies, administered with due caution, with the view to strengthening the stomach and intestines, and by that means procuring a more perfect assimilation of the food, and a regular secretion, excretion, and distribution of the juices, by which the strength of the solids being increased with every assistance from diet, a firm state of health might be established. Nor has the opinions of the moderns greatly differed; all have proposed medicines with a view to the same indications. All indeed have selected such remedies as they conceived best calculated for such purposes; but none of the modern writers that I am acquainted with, since the discovery of the Peruvian bark, speak of its virtues in the cure of gout, given in the manner here proposed. Sydenham, who was the first that advised the use of it, gave it in the quantity of a few grains daily. To pass over others, I recollect that Cullen, after condemning the use of other bitters in this disease, recommended the Peruvian bark with the same intention as Sydenham, merely as stomachic and strengthening, in the

same

same way as he proposed steel. Gotf. Held was the only person who, as early as 1714, considered bark as a specific against the gout. Not satisfied with the small doses proposed by Sydenham, he used it in somewhat larger quantities. After objecting to Sydenham's small doses, he adds, "Ego vero hactenus in praxi mea hunc corticem non granis sed plerumque ad scrupulum unum, vel drachmam dimidiam ordinavi, et illum quidem preservativè semel, vel bis in hebdomada; curative vero, malo jam appropinquante, mane et circa noctem assumere jussi; et sine topicis, tumor et dolores brevi remiserunt; febris in paroxysmo cum calore presens mitigata, et appetitus ciborum alias imminutus, vel plane abolitus resuscitatus, vel integre servatus, imo paroxysmus omnis brevi sublatus. Cortex enim noster ob blandum saporem amarum, fermentum gastricum vitiosum idque vel acre biliosum, aut viscidius acidum immutat; simulque, quod magnum in podagra beneficium, alvum apertam servat; sanguini quoque vigorem conciliat, ejusque acrimoniam corrigit; ac fibras tendinosas nerveas roborat, et solatur, sicque spasmodicas surarum, et aliarum partium contractiones et antevertit et abigit: anodyna etiam virtute pollens et blandum somnum inducit et dolores demulcet, nec minus cardiacum est, et collapsas vires restaurat. Uno verbo, Cortex Peruvianus in podagra divinum est remedium, quod multijuga experientia edoctus certó et firmissimè asseverare non nequeo." (Ephem. N. C. Centur. 3 & 4, Obs. 170, pag. 384.) It is much to be regretted, that this high road, so accessible to the most common observer, should, with many other equally valuable things, have become almost obliterated from the memory of man. The foundations of the healing art must be constructed not of visionary systems and theories, but of observations properly instituted, carefully repeated, and firmly established.

But though we should not be able to ascertain by authority the safety of giving bark in the gout, I trust those analogies which I shall now explain, will be sufficient to satisfy the attentive observer. If we once establish the use of bark in other similar diseases, we shall cease to wonder at its usefulness in this. Every attentive practitioner, and still more, every unhappy sufferer, will bear witness that the gout preserves regular periods in its paroxysms, not only respecting the season but the hour of invasion and remission; hence appears a ready analogy between this disease and the intermittent fever. Every one knows that the close of January, or the beginning of February, as

well as the advanced state of autumn, are seasons most dreaded by the gouty, as well as those in which we are to expect intermittents. It is also well known, that the autumnal paroxysms of each disease are the most obstinate, and that without the greatest caution, there is also most danger of a misplaced gout.

The gout, in its first attack, arrives at its most painful stage between two and three o'clock in the morning; on the following and succeeding days, the paroxysm returns about the same hour, going off with perspiration of the inflamed joint, or of the whole body. Oftentimes it imitates the exacerbations of the single or double tertians; and after the morning paroxysm another will regularly follow about four in the afternoon. In almost all my gouty attacks I have suffered this second or evening paroxysm with so much regularity, that I have constantly expected an increase of pain at seven in the evening, which should last till ten. Since the use of the bark this second paroxysm has never occurred.

It can hardly be disputed that the gout terminates after a certain period and number of paroxysms, varying according to circumstances; and also that, like the intermittent fever, every one of these fits finishes with a perspiration, having a sour smell, with turbid or bilious urine with a white lateritious sediment. It is also right to remark, as it may serve to strengthen the analogy, that gouty people are rarely if ever afflicted with ague; at least, among the numberless subjects of my acquaintance, I do not recollect one who caught the ague even when epidemic. Still further, the inhabitants of low and damp situations are more subject to gout than those who, in more elevated spots, enjoy a dry, clear, and better ventilated atmosphere. In the same manner as intermittents, gout follows the changes of season and vicissitudes of temperature; nay, it often precedes and foretells them, so that when cold, dampness, or a cloudiness are present, or approaching, not only is the present paroxysm exasperated and prolonged, but gouty subjects at that time free from the complaint, will be sensible of wandering arthritic pains, and other inconveniences; not uncommonly, these will prove the immediate cause of a fresh attack. Stoll, among the anomalies of the gouty fever, mentions vagam intermittentem, vagam remittentem, veram obscuram tamen ac veluti inchoatam intermittentem, quæ instituto paroxysmo cessat; and lastly, (after establishing the analogy in their attack and termination, between the bilious fever and gout) he considers it among the

the properties of gouty matter, that frequently an intermittent coming on a well treated gout, will prove its cure; in the same manner that an ill treated bilious or remittent fever will terminate in gout. It should also be remarked, that the celebrated Storck, in his Diss. de Pleuritide, suspecting this analogy between a truly inflammatory disease and the intermittent fever, proposed not long since treating pleurisy with extract of bark. In the acute rheumatism, a disease very similar to gout, Dr. Saunders exhibited with advantage, after the seventh day from the beginning of the disease, bark in conjunction with anti-phlogistic remedies, (Observations on Red Bark) probably induced by a similitude between that disease and the double tertian; nor does Cullen object to this practice, (Elements of the Practice of Physic, §. 469.) Considering then that the commencement and progress of gout is very similar to those of the intermittent fever, we may fairly infer that the bark will be useful in lessening the violence of the paroxysm in one as we find it actually does in the other.

The best authors advise in the worst species of intermittents, even attended with inflammatory symptoms, to give the bark rather too early than omit it too long; and if ever it disappoints them, they impute it to a too sparing exhibition of, or to the bad properties in, the remedy, finding by experience that no danger attends the giving a larger quantity. Nor is it possible to cure the worst species of intermittents, unless a large quantity is given as well in the interval of remission or intermission as during the paroxysm itself. To give the authority of innumerable writers on a fact so well established, could answer no other purpose than to show the writer's erudition. Why then should we not exhibit bark in the interval as well as during the paroxysm of gout, if we can diminish the severity of its pains? It may be dreaded lest, by suppressing the attack, the disease should become wandering or retrograde; but observation proves, that notwithstanding the pains and some other symptoms are evidently lessened, the paroxysms indeed are shortened but not extinguished. It is such remark too, that in those cases where the gouty action is imperfect in the joints, it is thought necessary to preserve the stomach from the deposition of what is called gout matter, by the use of tonics, such as bitters and stimulants; and among the rest, bark infused in wine is particularly recommended. It is therefore reasonable to hope, that at the access of a gouty fit, whether regular or atonic, bark is so far from being likely to obstruct the endeavours

endeavours of the system, that, given in large doses, no remedy seems better calculated to assist them.

Another still closer analogy has gout with diseases of the nerves, in which bark is a wonderful remedy. Not only the nature of the symptoms but the causes are common to both. Prostration of appetite, nausea, dyspepsia, vomitings, flatulence, pains, spasms about the region of the stomach and in other parts of the body, the belly at one time lax at another constipated. Hypochondriac symptoms, such as fearfulness, uneasiness, impatience, besides many other complaints, are only those nervous symptoms which often precede a gouty paroxysm, or harrass the patient as the fit declines. The facility with which the gouty pain shifts from one part to another, leaving the first free, shews a nervous affection afterwards connected with local inflammation. All modern authors admit the importance of bark in nervous complaints. These are the principal diseases described by Tissot in his remarks on the diseases of studious men, and of such as are addicted to excessive venery; and for these, in common with other authors, he recommends the bark. The very causes above mentioned, viz. close application, a sedentary life, and excessive indulgences, by the weakness they induce, become the exciting causes of gout, and should seem to require similar remedies.

Peruvian bark holds the first rank among bitter remedies. 1st. Because, to use the language of Murray, it strengthens most without producing heat. 2dly. Because it may be accommodated to every temperament, as daily experience shows in the cure of intermittents. 3dly. Because, by long continued use, it produces no atony in the stomach, which is not the case with other bitter remedies. Physicians have long since given up the vulgar dread that bark, in too large quantities, produces obstructions in the viscera, scurvy, and other complaints, which the observation of later ages prove to be unfounded, and that the general error has been not in the excessive but the sparin doses of that remedy. We ought not to wonder if, for t cure of so stubborn a disease as gout, a large quantity f bark should be necessary, as we all know that obstine agues require as much or still more. Nor ought we te surprized if the gout returns at determined distance of time, since the same happens not only with quartans but with the milder tertians; and certain it is, that the are persons in whom ague, however often cured, seems to turn occasionally like a constitutional disease. Still fur er, it has

has been shown that bark, given in smaller doses than will consume two ounces in the first two days, will be less successful, though not without its effects. From all which, it follows, that whatever propriety there might be in the cautions against the improper exhibition of bitter remedies, there can be no danger of the use of bark, even in the large doses above prescribed.

On the respectable authority of Sydenham, we might apprehend the exhibition of a purge in the beginning of an attack. That celebrated author entertained this apprehension even at the close of the paroxysm, and was fearful, during the intervals, lest purges might hasten a return. He appears however, afterwards, to have become less fearful, *(de mictur. cruenta)* and advises that, after a purge, an opiate should be given, to lessen the nervous irritation excited by the former. I might further assert, that many gouty paroxysms have, in myself, yielded to spontaneous bilious evacuations; and without recommending such a practice, am persuaded, that by promoting such evacuations, some paroxysms have been shortened, and others prevented. Laying aside the almost obsolete notion of gouty matter, which by such stimuli may be transferred to the intestines, it must on all hands be allowed, that by such evacuations the disposition to plethora must be lessened, any accumulation in the bowels removed, and the bark produce its full efficacy. The experience in my own case seems to confirm this. Though I found some relief from the bark only, it was less than others had done, nor was I restored to health till after a brisk purge.

Boerhaave* was not afraid of purges in gout, and particularly recommends those which he calls serous, and which he advises to be quickened by mercurial preparations. He proposed to his old arthritic friend, Bassand, the powdered scammony with unwashed calx of antimony. Van Swieten was so well satisfied with this doctrine, that in his commentary on the passage he does not scruple to recommend it, after examining the foundation of the practice, and adding the result of his own observations. There are not wanting gouty subjects, who conceive they have escaped the return of paroxysms by taking a purge every week. Dr. Joseph Quarin (Animadvers. cap. 15, p. 290) observes, that the body should be occasionally opened during

* Aphorism 1276.

during the paroxysm with the saline mixture of rob. sambuci, whenever the previous mode of living has been too free, if the tongue is foul, and the heat considerable.—Andrew Szootes* recommends eccoprotics, such as lenitive electuary with sulphur, some grains of rhubarb with manna and tamarinds, when the previous symptoms of gout appear, in its first, and in all its subsequent stages. Hoffman gives it as an axiom,† in all cases of pain, to purge before the exhibition of any other remedy. By these means, wherever the pain is situated, it is rendered milder, as, he asserts, he has repeatedly experienced in his own person.

My friend, Professor Lemos, very prudently exchanged the violent drastic proposed by the barber for Epsom salts, which he gave in a sufficient dose gently and copiously to cleanse the primæ viæ, and the better to ensure the efficacy of the bark; yet there are people with whom these salts disagree, producing nausea and vomiting instead of the desired effect. A mixture of tartarized infusion of sena with the salts, or with a small dose of tincture of jalap, will answer every purpose; and should the system seem too much agitated by this medicine, it has been before remarked, that the antispasmodic powers of the bark will be likely to relieve not only this inconvenience, but even that restlessness, impatience, and irritability of temper so characteristic of this disease. In my own case I have remarked, and it often happens in others, that the first doses of bark prove purgative; but notwithstanding this, I found the advantage of cathartic remedies; and the best practitioners are of opinion, that in intermittents the bark is more efficacious if preceded by laxative remedies.

There are not wanting such as maintain, that the inflammatory diathesis is a contra indication to the use of bark. But besides the authorities already produced from the best writers, and that the celebrated Storck treated pleurisy with extract of bark, we may further remark, 1st. that the pain from gout precedes the inflammatory symptoms nearly twenty-four hours; 2dly, that even the gouty inflammation is no objection to the use of bark, because this inflammation terminates only by resolution or desquamation, never producing suppuration, scirrhus, nor gangrene;

* Collectio Dissertat. circa morbos chron. Stollii, t. 1.
† Medendi Rat. Systema, tom. iv. p. 2. S. 2, c. n.

grene; in these respects approaching nearer to the erysipelatous. In these cases, Dr. George Fordyce (following Haller,* who found benefit from bark in his own person, when at the same time afflicted with erysipelas in his head and gout) asserts, that bark may be given with advantage, urging, that in the erysipelatous malignant sore throat, bark should be given in large doses. He afterwards extended the use of this remedy to all erysipelatous inflammations immixed with phlegmon, and even found it advisable to give it in the dose of a drachm every hour, if the stomach would bear it.†

Some advantage may arise from hinting at such other remedies as may increase the efficacy of bark, and hereafter bring it into more general use. No preparation is better than the powder during the paroxysm; but to patients of an extremely irritable stomach, the cold infusion may be equally servicable. Cullen and Lewis both inform us, that this may be made in less than twenty-four hours. If the powder is taken, it should be diluted in water, or being only wetted, it should be placed on the tongue, and swallowed by the assistance of water. Other changes may be made, according to the discretion of the physician.

When the inflammation is very violent, the application of leeches to the part may very much assist these other means. Before I was acquainted with the virtues of bark, I have frequently found the advantage of leeches in relieving the pain, when its violence induced me to expect a proportionate inflammation. But only in a single instance did I find the paroxysm shortened, though the bark has constantly produced that effect. There is reason to hope that both these assistances, preceded by a purge, may produce the best effect.

It has been already remarked, that the solution of guaiacum has shortened the paroxysm. There can be no objection therefore to the use of it at night, to produce a gentle perspiration after taking the bark. In order to fulfil every indication, it may be right to consider what diet will be the most suitable. This may done in a few words. Light nourishing food, easiest of digestion, gently spiced, and taken according to the powers of the stomach, and previous exercise: flesh not too strong at dinner; a sparing

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* Disput. ad Morbor. Histor. & Curationem. No. CLII. tom. vi. p. 836, towards the bottom.

† Transactions of a Society, &c. page 290 to 293, Art. XVI.

sparing and vegetable supper not protracted too late at night. It may be a question whether fish is proper for gouty subjects. If not oily or hardened by long salting, or dressed so high as to excite an unnatural appetite, there can be no objection to their use. On all these subjects, the common cautions have been so often repeated as to render it unnecessary to say more. Twelve years ago, I found fish so very hurtful to my own constitution, that before the conclusion of the first week in Lent, I was seized with gout, and found it necessary to return altogether to flesh. On the day, or the day succeeding a dinner of fish, I found threats of a gouty attack; but since the use of the bark, I have not only derived the advantages above mentioned, but during the Lent of this year, 1802, have confined myself to fish without any inconvenience. Those who are accustomed to drink wine with moderation, need not alter their habit, and for others a small quantity of Port may be serviceable. Water more or less cold, according to the season, but still cold, is very serviceable, taken in the morning fasting. Thin chocolate is the best breakfast, and a small quantity of coffee should be taken after dinner. Tea, and other liquors of that kind, may be thought hurtful by weakening the stomach; on this subject, custom and experience must be our guide. Sleep should be moderate, and at proper seasons; the patient should retire early to a bed not too soft, which he should quit early in the morning. He should avoid those evacuations which are not indicated. He should cultivate a cheerful mind, avoiding as much as possible those reflections which may sour his disposition, and also too close application. In short, the common rules for preserving health should be attended to in a particular manner by gouty subjects.

Excepting the customary injunction for what are called the non-naturals, the patient should avoid all medicines for a month or two, that he may be the more susceptible of their effects. At the end of that time it may be advisable to take a gentle purge, and afterwards an ounce of powdered bark, or a pint of the vinous infusion, or somewhat more of the cold watery infusion, or a saturated decoction for four days. Those who are troubled with phlegm, may add a small portion of Aristolochia, or wherever a stimulant is necessary, the powdered Aron may be a useful addition; or, if the stomach seems averse to these remedies, the steel wine may be exhibited alone or with some spirituous compound The vitriolic acid with alcohol (liquor anod. mineral. Hofmanni) may be given in sugar

sugar with advantage. After this, the patient should abstain from remedies, and attend only to diet.

Frequent exercise is the most important consideration during the interval of the paroxysms. It may be varied according to circumstance, by walking, riding, or gestation. It is certain, that on the decline of the paroxyms, they are much shortened by exercise. Sydenham advises it; reason and experience confirm his advice. I can with truth attribute the shortening of several paroxysms to using my feet whilst that use was still painful. They always mended as I proceeded, and long rest constantly induced a return of pain.

Having thus faithfully translated all the facts offered by Professor Tavares, your readers will be satisfied with a more general account of his remaining reflexions; or such as wish more minutely to peruse them, will refer to the original.

Cold bathing, as assisting the purposes of the bark, is advised either in the sea or at home. If the latter, the author prefers ablutions with sponge, or if bathing is preferred he advises only a single immersion; if in the sea, the time of bathing should be left to the sensations of the patient. The usual cautions are added.

Under all these means, Dr. Tavares only promises an alleviation of a disease for which the patient must have a predisposition. By this we conceive is meant, that the predisposition being a part of the original constitution, cannot be altered by remedies. But by his own and some other cases, it appears that not only the paroxysms may be shortened, but their return much protracted.

Some remarks follow on the importance of accurately distinguishing the disease, the state of the patient under it, and the necessity, in some instances, of producing a full fit for the relief of the whole frame. In all these cases, he wishes the patient to take the advice of an experienced physician, and, as an illustration, adds (in a note as it probably occurred after the work commenced) his own case in the year 1802.

On the 9th of June, without any previous apparent cause excepting the great and sudden changes of weather, he suffered a violent cramp in the whole course of *musculus peronæus longus* for near twelve hours. As it went off, a shining redness appeared for three days. As this vanished he felt restlenesss, anxiety, palpitations of the heart, impatience, slight vertigo, and lastly a sense of pain and heat coming on in both knees; all the former symptoms (the fore-

forerunners of a gouty paroxysm) were diminished. Suspecting the beginning and progress of a paroxysm, he waited patiently for its more complete formation, continuing his accustomed occupations, and using no remedy. On the 16th day of the month, the uneasiness in the knees going off, an obscure pain in the wrist threatened gout in that part; but suspecting a sluggishness in the attack, he took only two drachms of bark, either to throw out the disease or stop it, avoiding a repetition of the remedy lest he should interrupt the efforts of nature. Two hours after midnight of the 17th, a manifest and violent gout appeared in the wrist. After it had raged for sixteen hours, and whilst the inflammation was still high, and a white lateritious sediment appeared in the urine, he began taking the decoction of bark in the manner advised for intermittent fevers. After the third dose, a remission of pain began, which gradually lessened, so that he enjoyed a good night's rest. Neither the swelling nor inflammation subsided, but the motions of the hand and arm were now only impeded by their increased volume and not by pain.

After this follow some remarks on the different kinds of bark, a subject which has been amply discussed at home. The author also suspects that the white willow bark may be found efficacious in gout, as he experienced its usefulness even in obstinate intermittents.

Particular respect is due to the observations of an arthritic physician, on whatever relates to his own complaint. The use of opium, in all its preparations, he condemns from his own experience and his conversations with his brethren. The necessity of gradually augmenting the dose is strongly urged, and inconveniences thence following to the nervous system, by which the irritability of the constitution is much increased. Warm bathings of every kind are objected to for similar reasons, excepting the warm sulphur and sea or salt-water tepid baths. Even these the Professor objects to during the paroxysm. As to pediluvia in warm water, mixed with marine acid, though recommended by Dr. Rowley during the gouty fit, our author thinks should rather be used during the atonic or indolent stage.

The whole concludes with expressing, that the Author conceived it a duty to give the world gratuitously those instructions which he had received from motives of friendship, and to strengthen them with very few facts, compared to the number he might have offered: requesting

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an impartial consideration of his labour and a reciprocal readiness of communication in his Brethren.

Though the Medical world have perhaps relaxed a little in their terrors relative to evacuations in gouty people, yet the practice of giving bark in such large and repeated doses is, I believe, new in England. The Author's reflections also relative to the analogy between that disease and intermittent fevers, deserve notice, for though generally intermittents arise from a peculiar miasma, yet other causes will produce them. Other topical pains also have shown regular intermissions, and been cured by bark. But the extensive field of observation which our Author possessed, entitles him to particular attention in his remark, that gouty people, rarely, if ever, become the subjects of ague, and that in damp, aguish situations, gout is most prevalent. Professor Tavares' office as *Archiatro*, gives him the most extensive correspondence; and it is well known, that the country along the banks of the Tagus for a considerable extent in Portugal, is marshy and aguish. I might add, as a further analogy, that during my eight years residence in the delightful Island of Madeira, I saw no case of ague, nor scarcely of gout, among any of the natives; nor is there any swampy ground in any of the inhabited part of the Island. This hint is thrown out, that the readers of your extensively circulated Work, may improve it by observations on the air, situation, and diseases, of their respective circles of Practice.

I am, &c.

London, June, 1804. JOSEPH ADAMS.

Report of the Committee of the House of Commons *on the* Petition *respecting the* Fever Institution.

THE Committee, to whom the Petition of the several persons whose names are subscribed thereto, being Members of the Society for bettering the Condition of the Poor, was referred; and who were empowered to report the matter of the said petition as it should appear to them, with their observations thereupon, to the House; have, pursuant to the order of the House, examined the matter to them referred; and have agreed to the following Report.

Sir Walter Farquhar, M. D. having been examined, informed your Committee, that to his knowledge and expe-

rience the infectious fever was very prevalent in London, particularly among the poorer parts in confined situations; that, from information, which he repeatedly had, and on which he could rely, he had reason to believe that more than three thousand persons have annually died of it in and about London. That there could be no doubt that a house for receiving patients in the fever, would prevent the spreading the infection; particularly, if the houses from which the patients are removed, were properly cleaned and white-washed, and still more so if the bed cloaths, and also the patient's cloaths were burnt immediately. That he had known the most fatal consequences follow from the neglect of this precaution, even in the instance of a single article coming from an infected person. That he did not conceive that an establishment, on a sufficient scale to answer those beneficial purposes, could be formed in the metropolis without public aid, and had no scruple to say that he believed it impossible. That the infection is likely to be generally communicated, by the necessary intercourse subsisting between servants and other members of large Families, with persons in the lower classes of life, among whom the infectious fever more commonly prevails. That he has known repeated instances of its being so communicated to persons in the higher classes of life, particularly among children, and has found it necessary to lay it down as a rule in families where he is consulted, that the nurses should never have any communication with friends in their own houses, or with others they may casually meet. That there is good reason to hope, that by the judicious, diligent, and persevering efforts of such an institution as has been alluded to, that the infectious fever may be very considerably diminished, and even in the end almost entirely extirpated from the metropolis. And that the extinction of the infectious fever in the metropolis, would very greatly tend to prevent its taking place in those parts of the country which have a communication with it, more especially as the fever generally remains lurking in the constitution for some time before it prevents the patient from travelling or following his usual occupations. That it is of great importance in the cure of these fevers, to attend to them in an early stage; and general attention cannot be given to patients so infected in the wide extent of the metropolis, except by the establishment of an institution upon a considerable scale, and very carefully directed, so as to be capable of receiving all the infected persons who may apply. That the poor when in

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their own houses, labouring under the infectious fever, must always be attended by their friends with hazard; and though some peculiar constitutions may escape, in general the attendance must be highly dangerous.

Maxwell Garthshore, M. D. having been examined, also informed your Committee, that an institution to prevent the spreading of contagious malignant fevers, has been established within these three years in Gray's Inn Lane Road, which, although upon a very contracted scale, previous to February last received 325 fever patients, of whom 289 have been dismissed cured, and the houses of many of them, and others, purified, white-washed, and cleansed; 29 died, and seven then remained in the house. That he does not think the present establishment sufficiently extensive, to remedy the evil of the infectious fever in the metropolis. That a public institution would afford means both of preventing and curing the infectious fever, which cannot be practised in the houses of the poorer classes of society; but that he is of opinion that a public institution, of sufficient extent to remedy the evil in the metropolis, cannot be established by private subscription unassisted by public aid. That it is of great importance that the infectious fever should be attended to in its early stages; and that he believes that not one case was ever taken into this institution in an early stage, which was not soon recovered, it being a disorder the prevention and cure of which are perfectly well understood. That the infectious fever has prevailed for a long course of years in some of the crouded parts of the metropolis, in a more or less degree, according to seasons and circumstances.

Thomas Bernard, Esq. having been examined, likewise informed your Committee, that the London Fever Hospital in Gray's Inn Lane was established in May 1801, and a House of Recovery opened in Gray's Inn Lane in February 1802. That great exertions have been made in every possible way to obtain subscriptions, and yet the present funds are not equal to the maintaining that small house on the present scale. That the whole sum which has been raised by donations and subscriptions, has amounted to £.4378, the annual expences of the house are between £.600 and £.700, and that the house is not adequate to one-tenth part of the patients who want relief, as it contains only sixteen beds. Finding that this establishment will not be adequate to the purpose, the society have begun raising a fund of £.3000, and £.1600 has already been subscribed, upon condition that parliament would grant such a sum,

as, together with those subscriptions, would prove effectual to the desired object.

Upon the whole, your Committee find that the infectious fever has been long prevalent among the poor of London, and that above 3000 persons have, on an average, annually died of it within the bills of mortality.

This evil appears to your Committee to have continued for want of some regular system being adopted to check its progress, and to purify the houses and other buildings in which it has prevailed. In May 1801, an Institution for the Cure and Prevention of Infectious Fevers in the Metropolis was established by the Society for bettering the Condition of the Poor; and in February 1802, a London House of Recovery was opened, in which, although it contains no more than sixteen beds, upwards of 320 fever patients have already been cured.

This establishment has been hitherto supported by the contributions and subscriptions of individuals, and nearly the whole of £.4000 so collected has been expended upon it. The extent of the institution appears to your Committee insufficient for the attainment of its object; and although great exertions have been used, it has not been found practicable to raise, by private subscriptions, funds large enough to increase or support it, more especially as it is essentially necessary to destroy the cloaths of the patients, and purify the houses in which they have been attacked by the complaint. In the expectation that, towards an object of so much national importance, aid might be afforded by the legislature, a sum of £.1600 has been subscribed by several individuals, upon the condition of such assistance being first received. The Institution cannot, therefore, have the benefit of this bounty, without it is also supported by Parliament; and, upon the whole, it appears to your Committee, that the object of the petition is of the highest importance, and that the proposed Institution would be productive of great public advantage.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

I Had hoped that the war of words had been no longer an incumbent duty on the believers and propagators of that great blessing to mankind, promulgated by Jenner; and,

and, that the lancet only, and not the pen, was the sole instrument needful in the dissemination of their principles. I thought there could be no longer enemies to its general establishment, but such as were inaccessible, from refusing (through prejudice) the aid of their senses in informing their judgment. To have persevered in contention with such, would have been 'waging an inglorious war;' they might, without dereliction of duty, been left to have suffered by themselves or kindred, that merciless affliction for which the cow-pock is so mild and safe a substitute.—But the pamphlet of Mr. Goldson, and the opinion of a very respectable physician of this city, who had read that pamphlet, and who, to my concern and surprise, declares his belief, that those who have had cow-pock are liable to small-pox, and that the cow-pock does occasion peculiar and foul eruptions; shews that I was too sanguine in my expectations, and that it is yet necessary, that those who have had experience and conviction of its importance and utility should not be silent.

It is now four years since my doubts of the mildness and security of cow-pock have been subdued, by previously learning and observing all I could on the subject. Since that time, I have had considerable opportunities of confirming or invalidating my opinion, arising from being inoculator at one of the stations of the R. J. Society, in a very populous neighbourhood; from private practice, and from being a member of the medical council of the R. J. Society, the duty of which council it is to investigate all cases of vaccination attended with peculiar circumstances, whether arising from coincidence of other diseases, suspicion of insecurity, imputation of small-pock succeeding cow-pock, or any consequences arising from vaccination; and having given all the attention I was able to all these points, I do most solemnly declare, I have not seen the small-pox take place after the cow-pock, nor have I ever seen the peculiar and foul eruptions, or any other arising from cow-pock.—But I have witnessed the most foul conduct among its adversaries; one out of many (because it is very recent) I will relate: A woman called with her child to consult me about vaccinating it, but her mind was not quite decided; because, she said, her husband was averse to it, and a neighbour of hers had a child now dangerously ill with the cow-pock. I assured her there was no danger from cow-pock, and I vaccinated the child. I asked her a few days after how the child was that was so ill of cow-pock; she answered, that since her own had been

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done, the *same* woman said her child had not been inoculated, and was ill from teething only. This appears to me to have been a contrivance between the woman who pretended her child had been vaccinated and the father of the other child, to prevent the vaccination of the one that was brought to me. This report would reach the ears of many whom the falsehood of it would not reach. The woman whose child I vaccinated, said the other had since thought of having hers done; but the medical gentleman told her the child would have breakings out spring and fall, so advised her not, but to have it inoculated with the *natural* sort.

In proof of the sincerity of my conviction, I have vaccinated my wife, two children and a female servant, in my own family.

With respect to Mr. Goldson's pamphlet, it is certainly interesting, and bespeaks a man who would write very creditably on any subject with which he was well acquainted, but he does not even pretend to have had much experience in cow-pock. His book is, therefore, either quite nugatory, or proves a great deal *too much*. Can any rational person believe so many cases of the small-pox supervening cow-pock can have happened, in a limited and private practice, to one practitioner, when none have manifested themselves to several who have had very extensive experience, both as public and private practitioners; for such is the testimony of Dr. Woodville, who, with his coadjutor, Mr. Wachsel, have vaccinated their tens of thousands; such is the testimony also of Dr. Jenner, Dr. Pearson, Mr. Ring, &c. &c. who have vaccinated their thousands.

The following is published under date of the 20th June, 1804, by the Society under the direction and inspection of Dr. Pearson.

"In the *last* fortnight, a number of subjects who had undergone vaccination in the year 1800, have been submitted to the test, or counter proof, (variolation) in circumstances the most favourable for exciting small-pox; also subjects who were vaccinated in Dr. Pearson's early practice, in 1799. The evidence from which demonstrates a uniform series of facts the reverse of Mr. Goldson's conclusions.

"What is the rational inference from all this, but that Mr. Goldson has been misguided by some fundamental error in his practice. But should it be found (though I believe it has not yet occurred) that one in many thousands has the small-pox after having had the perfect cow-pock, it

it is no more than has happened after the small pox itself, according to the testimony of some of the most experienced practitioners; and the most ardent advocates for the cow-pock, do not pretend that it is a surer preventive than the small-pox itself. If it should continue to be urged, that the antidote only operates for a time, may I ask these gentlemen what time they mean? I flatter myself they will very soon be impelled by facts to name such a period, as not one in ten thousand of the youngest of our patients (though vaccinated) are likely to survive. There are many instances supported by most respectable testimony of persons resisting every known mode of communicating small-pox; ten, twenty, thirty, forty, and even fifty years after having had the cow-pock.

"Dr. Jenner gave us the following (four years ago) not one of which have been disproved or contracted.

Josiah Mernet	25	Years since.
Sarah Portlock	27	
Jn. Phillips	53	
Mary Barge	31	
Elizabeth Wynne	38	
Wm. Stickcomb	10	
Hester Wakeley	26	

"William Fermor, Esq. of Tusmore, Oxfordshire, the following:

Wm. Tredwell	3	Years since."
Alban Collingridge	4	
Mr. Stevens	27	
Thomas Slater	6	
Mr. H. Collingridge	10	

Many similar facts have been published by Dr. Pearson and others. Dr. Woodville inoculated more than one thousand after cow-pock, not one of whom had small-pox. Such are the arguments the advocates have in support of their opinion; and although there is nothing new in this statement, I have thought some good might arise from repeating them in your Journal, finding, to my regret, that the old adage of, 'None so deaf as those who are unwilling to hear,' is applicable to this subject. I feel it a high moral duty, possessing the sentiments I do of the cow-pock, to offer them again to the senses of those on whom little impression has been made. I would intreat them to lend their ears, their eyes, and their understandings, unbiassed, to a subject in which the community in general, and the low and indigent in particular, are so greatly interested.

 I have

I have very lately (and I reflect on it with the greatest satisfaction) by this mild preventive, rescued a poor mechanic, his wife, and four children, from the terrors of that merciless disease the small-pox; who had left the country (where he found all his exertions inadequate to their support) for this town, where he hopes to be more successful, but where it was next to impossible they should all escape the small-pox; and if one had taken it, it must have communicated to all: — then, how truly deplorable would have been their situation, who would have had to struggle some weeks under the pressure of disease; and, after what is usual (in such cases), parting with their garments and other necessaries, those who survived the wretched wreck of disease would, in all probability, have found themselves in a workhouse or a jail.

And what is the contrast under vaccination? The father has not lost a day's labour, the mother has not been suspended an hour from the numerous duties which such a family of young children must require of her, nor called a minute from other cares to attend to the moans and sufferings of her children!

Can any humane mind be insensible to these advantages? Will any good man *abandon* or *discourage* the progress of a discovery, which, to say *only* what I trust its greatest opposers will confess, has the support and credence of the most enlightened philosophers, experienced practitioners, and philanthropic characters, that adorn and illumine the present gloom and deformity of our hemisphere. I am, &c.

Copthall Court, July 14, 1804. L. LEESE.

To the Editors of the Medical and Physical Journal.

GENTLEMEN, *Salisbury Square,* 13, *vij.* 1804.

WILL ye have the ingenuousness, the candour, to insert in your next Number, a most sincerely meant censure upon yourselves? While the sentiment of Horace, *Sunt delicta tamen, quibus ignovisse velimus,* may on this occasion be generally the feeling of your readers; I confess for myself, that on your treatment of the great subject of Vacciolation, *Indignor quandoque bonus dormitat Homerus.* How could ye, in your Review of Goldson's pamphlet, think of

of taking up the time of your readers in considering what were the merits or demerits of the medical men in any particular neighbourhood remote from, or near to, 'Head quarters of science!' Whichsoever seat of the Muses be the head quarters of medical science in the British empire, mails, stage-coaches, &c. are the never failing *aids du camp* which convey the *ordres du jour* throughout, and beyond the whole imperial field! But, chiefly, on the subject which forms the *title* of the pamphlet, I have never seen you so flat; and, pray, what can ye have meant by the entire pamphlet claiming "an attentive perusal from all the partisans, friends and well-wishers of Dr. Jenner's discovery?"

Ye have promised yourselves too much, if ye have expected that the pernicious pamphlet would hereby become extinct; but, I correct myself: It occurs to me, that ye may have thought it ought to be in the hands of every friend of vacciolation, that they might always have it in their power to shew the fallacy of the author's conclusions, the incompleteness of his statements. In the consciousness of his own unwavering veracity, he seems quite to have forgotten that the statement of medical cases requires judgment as well as truth, and that the proof of the concurrence of both in the report is always due to the reader, who may have perhaps never before heard the name of the author, and who owes no credit to his *ipse dixit*.

Since my last, it has occurred to me, that I may myself have appeared somewhat deficient in not offering any authority for the statement of the pamphlet being gratuitously distributed. I could not, without a sort of breach of confidence, unveil the springs whence the streams have already borne it away so far and wide throughout the empire; but I may give some idea of the activity and extent of the diffusing influence, by the mention of the arrival from Dublin of a professional friend, who received it a few days before his leaving Ireland, without note or message, in an *envelope* with the following address: James Rivers, Esq. 26, Queen Street, or at the Hospital of the House of Industry, Brunswick Street.

Pythagoras, in the fulness of his joy, is said to have sacrificed a hecatomb to the Muses, on his discovery of the proposition which forms the 47th of Euclid. How happens it that our author, on his supposed discovery so shockingly serious, possesses an apathy more than philosophic? I once saw the captain of a Guineaman drink glass after glass of brandy, till he fell asleep on his chair. "There

is a man, said one of the company—but the tear of compassion never moistened his cheek." Where were all the sympathies, the ordinary feelings of humanity, when our discoverer should have revealed to the world, that the Jennerian inoculation might not ultimately prove a permanent prophylactic; that the Small Pox, at some future period, might become a greater scourge to the world than ever? Does any expression of regret or sorrow escape him on the melancholy occasion? With all his anticipation of a *Vox in Rhama, lamentatio, et fletus, et ejulatus multus*—the Rachels *plorantes suos filios* seem neither to have excited his sighs nor tears. Like the geometricians and chemists of Burke, 'bringing from the dry bones of their diagrams, and the soot of their furnaces, dispositions that make them worse than indifferent about those feelings and habitudes, which are the supports of the moral world,' he is too much absorbed in his favourite object. He seemeth a Gallio, not to care for these things. But let us hope he only seemeth. He wishes not to provoke controversy; and he has provoked it. He *only* asks for further investigation; and further investigation is not wanted. Let him inform himself of what has been already done. I hope he will shortly be fully convinced that he has hitherto only been 'puzzled in mazes, and perplext with errors;' when a most respectable, a truly honourable, duty may fall to his lot, that of making public acknowledgement. This is the conduct I took upon me to recommend more than ten years ago to the Yatton demoniac, from whom about seven devils should have been exorcised, by perhaps about as many fanatical preachers at Bristol; but in this case the confessor may neither have to say *peccavi* nor *poenitui*, but simply, 'whereas I was blind, now I see.'

Having taken the liberty of introducing the grave subject of moral habitudes and feelings, and even of insinuating an inattention to them on the part of our author, let me beg of him to excuse this greatest possible breach of liberality. It is a very easy thing to make fine professions of humanity. I have learnt to set very little by them, from hearing so much of them amid the revolutionary storms of the fickle nation, where I had only to turn my eyes to a public building, to be disgusted with the discordant inscriptions "*Humanité, Fraternité, &c. ou la mort.*" Let us hope then that William Goldson, with every appearance of apathy amidst his death-threatening alarms, may yet feel as a man. As such I would wish to congratulate him on his own total failure. Yet a little, and he may

may have to declare to the world, I am happy, supremely happy, in being at length fully convinced that all my conjectures on the inefficacy of the Jennerian Inoculation were erroneous.

> "The grateful nations one loud pœan raise;
> A wond'ring world resounds our JENNER's praise.

18, vij, 1804. Will the extreme importance of the subject (Vacciolation) on which I have ventured to commit myself before the medical world, through the medium of your Journal, induce you to receive yet a few words more, probably the last I shall now have to offer? They are excited by, or rather extracted from, the "Answer to Mr. Goldson, by John Ring, member of the Royal College of Surgeons." I can neither adopt the *nunc dimittis* of Simeon in the Temple, nor the last dying words of Wolf on the heights of Abraham, on this occasion; but my joy is great. The estimable author, in the consciousness of having done his duty, of not having lived in vain, may derive something of this last consolation of the human heart. He has furnished 'an antidote to the poison.' How completely he has done it, ye will no doubt have to shew in criticising the work; but do give me leave to point out to your anxious readers (Medical and Physical Journal, page 553, June, 1804) how little dependance they ought to place on the accuracy of the statements which may have excited their alarms.

Page 7. "As Mr. Goldson assures us he does not wish to spread vain alarms, and that he should not think himself justifiable in concealing the cases which have fallen under his observation; it is difficult to conceive how he could think himself justifiable in bringing forward a partial statement of a case, and concealing a circumstance, which alone is sufficient, in this instance, to vindicate the character of vaccination from the charge he has brought against it."

"It must be recollected, that if Mr. Goldson is not accurate in his statements, if the fidelity of his narrations can be impeached, whether the fault be a treacherous memory, or too many other avocations, his whole testimony must fall to the ground."

Page 8. "Mr. Goldson is an active magistrate, and a surgeon in considerable practice. It is therefore more liberal to suppose, that other avocations prevented him from attending to the case like an affectionate parent; than that he would have suppressed any important facts, in order to make it appear, &c."

Let

Let me now conclude by giving you the address of a few more applicants from the southward, for matter at the Central House; but, without any comment, lest William Goldson should again discover many wilful misrepresentations, as he asserts, but fails to prove, while he entirely forgets to attempt to defend all his incautious or unguarded statements, against the unmannerly remarks of

Yours, sincerely,

JOHN WALKER.

" Lord Seaforth, Governor of Barbadoes (Portsmouth, on his way to the West Indies)
Mr. Tristram Harper, Gosport.
Mr. Tupper, on his way to Guernsey.
Mr. F. Weber, Hilsea Barracks, Surgeon to the King's German Legion.
Mr. Mill, Hilsea Barracks, Ensign of the 1st. West India Regiment.
Edward Jackson, Guildford.
Morris Birkbeck, Wanbro'.
Mrs. Lewin, Ridgeway Castle, Southampton.
Lord Egremont.
T. Hodson, Lewes.
C. Morgan, Henfield.
The Widow of Don Manuel Azlor, Viceroy of Navarra.
The Count de Bureta, of Saragosa.
Mr. Long, Hailsham."

We have no objection to shewing our candour by the insertion of Dr. Walker's reproof; and we entertain no doubt of his perfect sincerity in the great cause of humanity. But surely he would not wish us to set ourselves up as Dictators. We shall always wish our Journal to be a 'Ulysses's bow, on which every man of genius and learning may try his strength and skill.' If any man fail in his attempt to bend it, he only exposes the impotence of his arm; his shafts fall harmless. And the giving publicity to such failure, we consider as one of the most important services that we can render to science and to humanity. Edit.

To the Editors of the Medical and Physical Journal.

Gentlemen,

War and disease are the concomitants of our existence. Human nature seems pregnant with the seeds of these evils even on its birth. Both oftentimes assume an almost unlimited extension in their devastating powers, by which all descriptions are precipitated into Eternity. The miscellany of human suffering galls even the pen of traditional fidelity, and often deters the mind's retrospect

into

into the complication of misery—the direful consequences of war and disease. But the historian must not stop here, every event is incumbent on him to relate; the concurrence of contingencies, the unique influence or the complex issue from the co-operation of efficient principles, and the eventful explosion of preconcerted plans, form the field for his historical powers. The faithful delineation of a campaign challenges at once all the warm emotions of the breast; a patriotic enthusiasm is excited at the recital of native valour, and the ardent glow of sympathy, cherished by the tale of extraordinary virtue and valour, follows with gratitude the victor to his grave.—What breast was not animated with every worthy feeling on the catastrophe of our brave Abercromby; and although misfortune deprived the field of our General, he will ever continue to live in the memory of a grateful posterity.—It is time that a true and accurate history of this great man's misfortune should be given to the world, and I therefore, through the medium of your invaluable Journal, call upon that gentleman (Mr. Gillham*), whom that deserving and meritorious artist† has exhibited as the medical officer and operator on the occasion. There have been so many different accounts given to the public, and none of which being clearly and professionally detailed, that I embrace this period, although distant, to request of that medical gentleman, whom the public now recognizes‡ as the surgical attendant, to describe the precise place, depth, superficial extent, and external consequences or termination of the wound which occasioned the loss of the virtuous General. As I am confident that most medical men, and more especially those who served during the campaign in Egypt, are desirous for a faithful history of the case, and as Mr. Gillham has not given to the public the least information upon this important and interesting subject, I have not the least hesitation, from my personal knowledge of Mr. G. to assert, that the medical part of the expedition will be soon gratified by perusing the interesting particulars of the fatal case. I am, &c.

Chancery Lane, July 12, 1804. AN OLD CAMPAIGNER.

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* Mr. Gillham having received great and irreparable injury in his eyes from the powerful influence of the climate, has been placed on the invalid list, and now practices as a surgeon and apothecary in this metropolis or its environs.

† Mr. Porter, one of the most ingenious and meritorious artists of the present epoch.

‡ The picture of the death of Sir R. Abercromby, by Mr. Porter.

CRITICAL ANALYSIS

OF THE

RECENT PUBLICATIONS

ON THE

DIFFERENT BRANCHES OF PHYSIC, SURGERY, AND MEDICAL PHILOSOPHY.

A Treatise on Gun-Shot Wounds, which obtained the Premium given by the Royal College of Surgeons in London, for the Year 1803, *by* T. CHEVALIER, 8vo. pp. 146, London, 1804.

The Author of this valuable Treatise had for some time meditated the composition of such a work, when the Royal College of Surgeons, in the year 1801, announced Gun-Shot Wounds as the subject of a Prize Dissertation.

" This induced me (says Mr. C.) to lay aside my intention, the fulfilment of which, I thought would probably be rendered unnecessary. But finding they were again proposed as a Thesis for last year, and thinking the circumstances of the times made it desirable that something should appear on the subject, I resolved to commit my ideas to writing, and to submit them, unknown, to the judgmentof the College.

" By this method I was sure of obtaining the unbiassed opinion of competent judges in the first instance; and their decision having been in my favour, I am more satisfied, than if I had merely asked the opinion of any friend, as a friend, or trusted entirely to my own.

" It may however be proper to observe, that the object I have had in view in writing this treatise, has simply been, to make a faithful and correct investigation of the characteristic phænomena of Gun-shot Wounds; to explain their effects upon indisputable principles in physiology and pathology, to point out those processes by which only nature can repair all that is reparable in such a complication of violence; and to deduce from thence that treatment by which she may be most effectually assisted in her work, and the obstacles to her performance of it in the best and safest manner, may be either prevented or removed.

" Such then having been my object, while I hope my labour will not be in vain, I am desirous that the reader should avail himself of every other assistance by which he can perfect his knowledge of the subject, and illustrate the doctrines, or supply the deficiencies he may observe in this treatise. I would particularly recommend his perusal of the small, but masterly work of Le Dran on Gun-shot Wounds, which I once had a thought of translating, and publishing, with such alterations as would comport

port with our later improvements. But I soon found that these must be so numerous as to make it not worth the trouble. I cannot however withhold my praise from a treatise, which I never take up without pleasure. The work of Ravaton is excellent in its kind. Those of the late Mr. Hunter, and of Mr. John Bell on the same subject, notwithstanding their difference in some particulars, are also well worth an attentive perusal. And perhaps in these four works will be found the substance of most, if not of all, that can be collected from former writers; freed from a number of errors, and enriched with many solid and judicious remarks. Many cases however, recorded in the Memoirs of the Royal Academy of Surgery at Paris, and in other works both in French and English (not forgetting the writings of old La Motte, and Mr. Serjeant Wiseman) will be of use to the student, if the circumstances in them which are of real importance be properly discriminated from the rest, and from the obsolete theories with which they are intermixed."

Mr. C. divides his Treatise into two parts; the first is devoted to the consideration of the true nature and character of Gun-shot Wounds, in which the Author treats of the "nature of wounds in general; the nature of contusion, laceration, hæmorrhage, and fracture; the operation of extraneous substances on the living solid; and the laws by which the course and effect of bodies in motion are necessarily determined."

Mr. C. concludes his first part with the following observations.

"From what has been said, may be seen the reason of that concussion or shock, (*ebranlement*) which is given, in many instances, to the whole system, by the infliction of a gun-shot wound, and which has been remarked by the best writers on this subject, to be often attended with grave, and even alarming effects; extending not only over the injured part, but affecting the system at large. For as the resistance to the shot is afforded, not only by the texture of the injured part, but also is in part made up by the connection this has with other parts, and with the whole body, these also will therefore participate in the violence; and they will do it so much the more, in proportion as the part immediately wounded, has from its attachments, its texture, elasticity, or importance to life, a greater connection with the stability, or with the functions of the rest. Hence a shot striking against a tendon or a bone in one of the extremities, will produce a greater concussion than if it struck only against softer parts; a shot striking against a muscle in action, will produce more concussion than if it struck against the same part of the same muscle at rest; and a shot striking the head, or wounding the liver, lungs, or intestinal canal, will generally bring on an instantaneous derangement of the whole system, with which the functions of these parts are so closely connected.

"To all this must be added, an alarm and apprehension which immediately come upon the mind, which is often increased by the

uncertainty of the patient about his real state; but which, in wounds of some parts, the most determined courage is not always sufficient to withstand.

"Having thus endeavoured to analyse the phænomena of a gun-shot wound, considering it first as a complicated species of violence committed on matter variously organized, and also to explain its effects as violence committed on *living* matter; and having pointed out the processes which naturally ensue from each of these circumstances respectively, in order to shew the indications of cure which may be deduced from them, I shall now proceed to point out by what mode of treatment those indications may be most rationally and successfully pursued."

In the second part, Mr. C. delivers the treatment of gun-shot wounds, which he does, as he has before done the description of them, with great clearness and precision. But our commendation is not necessary to secure this excellent Tract an attentive perusal; the character of the Author, and the College of Surgeons have done it already.

Surgical Observations, containing a Classification of Tumours, with Cases to illustrate the History of each Species; an Account of Diseases which strikingly resemble the Venereal Disease, and various Cases illustrative of different Surgical Subjects. By JOHN ABERNETHY, F. R. S. &c. &c. 8vo. pp. 263. 1804.

THE importance of an arrangement of tumours leading to an accurate description of their appearance, history, and treatment, must be admitted by every one. Impressed with this idea, Mr. Abernethy has for some years past made use of the extensive opportunities the practice of St. Bartholomew's allows him to select his different specimens, to exhibit them at his lectures with an arrangement he now offers to the public at large. To this last he was prompted by a consideration of the importance of the subject, and that it could only be undertaken by men of such large opportunities, though others might comprehend it when demonstrated. A still further inducement was, that the minds of men have lately been laudably incited to the investigation of cancer, in hopes of discovering a cure, that the society instituted for that purpose have proposed certain questions which the author has attempted to answer, and lastly, as much *collateral* knowledge is required to investigate any subject with accuracy, that probably this paper may tend to point out the required distinctions, and furnish such collateral knowledge. After these preliminary observations, the author introduces his definition by a few remarks on his predecessors.

"The subject of tumours occupies a considerable space in the works of the antient writers on medicine. They seem, however, to have considered the subject rather with regard to its name than its nature; for we find a great variety of dissimilar diseases collected, I cannot say arranged, under the same general title. The error has

has descended to us, and even in Dr. Cullen's Nosology we find diseases of arteries, veins, glands, tendons, joints, and bones, brought together under one order, and designated by the same name of *tumours*. Some of these also are merely enlargements of natural parts; whilst others are entirely new productions, having no existence in the original composition of the body. We have, I believe, sufficient knowledge of the nature of these diseases to class them more scientifically; and as this has not yet, as far as I know, been done, I shall endeavour to supply the deficiency.

"In the definition which I mean to give of tumours, I shall trespass as much against the usual import of the word, as nosologists have hitherto done in their classifications against the nature of the disease. For I shall restrict the surgical signification of the word tumour to such swellings as arise from some new production, which made no part of the original composition of the body; and by this means I shall exclude all simple enlargements of bones, joints, glands, &c. Many enlargements of glands are however included in the definition, as they are found to be owing to a tumour growing in them, and either condensing the natural structure, or causing the absorption of the original gland. Sometimes also the disease of the gland seems to produce an entire alteration of structure in the part; the natural organization being removed, and a new-formed diseased structure substituted in its stead. In either of these cases the disease of the gland is designed to be included in the definition; and the practical remarks which follow will equally apply to the same kind of diseased structure, whether it exists separately by itself, or occupies the situation of an original gland. The structure of tumours is also a part of morbid anatomy which deserves to be examined; since (as it did not come within the scope of the undertaking) it has not been fully discussed by Dr. Baillie in his very valuable treatise on that subject. Yet as he has given representations of glandular parts enlarged by a diseased structure of an entirely new formation; so I shall have the advantage of referring the reader to his accurate and expressive representations of some of those appearances which it is my purpose to describe. There is an observation of this judicious and accurate writer which I shall take the liberty of inserting, since it justly appreciates the degree of utility of investigations like the present: he observes, 'That the knowledge of morbid structure does not lead with certainty to the knowledge of morbid actions, although the one is the effect of the other; yet surely it lays the most solid foundation for prosecuting such enquiries with success. In proportion, therefore, as we shall become acquainted with the changes produced in the structure of parts from diseased actions, we shall be more likely to make some progress towards a knowledge of the actions themselves, although it must be very slowly.'"

Nothing can be more just than these remarks, but we cannot help wishing the definition had been more pointed. If these tumours, which are found to grow in glands, are new formed parts,

there could be no occasion for the exception. If a new formed diseased structure is substituted instead of the original organization of the gland, the same objection seems to occur. However in this respect, Mr. Abernethy is more culpable in his arrangement than in his definition. By subsequent passages we find, that in all these cases of tumours he conceives an economy is established for the support of themselves different from, if not independent of, original formed parts; at least such seems the case by the following passage. "Thus an organized concrete (coagulated blood) becomes a living tumour, which has at first no perceptible peculiarity as to its nature, though it derives its supply of nourishment from the surrounding parts; it seems to live and grow by its own independent powers; and the future structure which it may acquire seems to depend on the operation of its own vessels. When the organization of the gland seems changed into that unnatural structure, which is observable in tumours, it may be thought in some measure to contradict those observations, but in this case the substance of the gland is the matrix in which the tumour is formed."

"The structure of a tumour," continues our author, "is sometimes like that of the parts near which it grows. Those which are pendulous into joints, are of a cartilaginous or osseous fabric; fatty tumours frequently form in the midst of adipose substance, and I have seen some tumours growing from the palate, and having a slender attachment, which in structure resembled the palate. Sometimes, however, they do not resemble in structure the parts from which they grow. The instance just mentioned, of the pendulous portion of fat growing from the peritoneum, will serve as an instance: the vessels which had shot into it, made the tumour into fat, whilst the neck was of a fibrous and vascular structure. I have seen osseous tumours unconnected with bone or periosteum; and indeed, in general, the structure of a tumour is unlike that of the part in which it is produced. Therefore we seem warranted in concluding, that in many cases the nature of the tumour depends on its own actions and organization; and that, like the embryon, it merely receives nourishment from the surrounding parts.

"If, then, the coagulable part of the blood be from any cause effused, if the adjacent absorbents do not remove it, and the surrounding vessels grow into it, the origin of a tumour may be thus formed. It may be right to reflect a little on the causes which may occasion a deposition and consequent organization of the coagulable part of the blood; as such reflections throw light on the nature and growth of tumours, and lead to the establishment of principles, which are applicable to tumours in general. The deposition of the coagulable part of the blood may be the effect of accident, or of a common inflammatory process, or it may be the consequence of some diseased action of the surrounding vessels which may influence the organization and growth of the tumour.

"In the former cases, the parts surrounding the tumour may be considered simply as the sources from which it derives its nutriment,

ment; whilst it grows apparently by its own inherent powers, and its organization depends upon actions begun and existing in itself. If such a tumour be removed, the surrounding parts, being sound, soon heal, and a complete cure ensues. But if a tumour be removed, whose existence depended on the disease of the surrounding parts which are still left, and this disease be not altered by the stimulus of the operation, no benefit is obtained: these parts again produce a diseased substance, which has generally the appearance of fungus, and, in consequence of being irritated by the injury of the operation, the disease is in general increased by the means which were designed for its cure. It appears therefore that in some cases of tumours, the newly formed part alone requires removal, whilst in others the surrounding substance must be taken away, or a radical cure cannot be effected.

"There is yet another circumstance deserving attention, before I proceed to the particular consideration of the subject; which is, that a tumour once formed, seems to be a sufficient cause of its own continuance and increase. The irritation which it causes in the contiguous parts, is likely to keep up that increased action of vessels which is necessary to its supply; and the larger it becomes, the more does it stimulate, and of course contribute to its own increase."

These remarks lead our author to some reflections on the mode of cure in the early stage of tumour. These are by topical bleeding and cold applications. After the increased action is thus subdued, he proposes stimulant remedies to promote absorption. But if these tumours have really an economy of their own, we cannot easily conceive how application applied to the neighbouring parts can produce any lasting effect.

After these remarks, Mr. Abernethy enters on his division, and still confining the word to substances which made no part of the original structure of the body, he denominates the first genus from its firm and fleshy feel, *sarcoma* or *sarcomatous tumour*. This genus, he observes, contains many species. Those enumerated by our author are, *Common vascular or organized sarcoma, adipose sarcoma, pancreatic sarcoma, mastoid or mammary sarcoma, tuberculated sarcoma, medullary sarcoma* (sometimes called soft cancer), *carcinomatous sarcoma*. For the description of these we must refer our reader to the work, where he will find them illustrated with cases.

The next *genus* of tumours under the *order* of local diseases is *encysted tumours*. Though only one species is mentioned, yet it seems to comprehend so many varieties as might, we think, have authorised some divisions, if not into species, at least into varieties. Under the cases by which this genus is illustrated, we have the word wen more than once. We sincerely wish a precise meaning were given to the word, or that we were informed, that by the term is meant a tumour of any of the above description.

(To be continued.)

An Account of the Discovery and Operation of a new Medicine for Gout, Second Edition, with many Additions, and Testimonies of Persons of the first Respectablity. By A. WELLES. 8vo. pp. 212. London, 1804.

IT has been observed and acknowledged for two thousand years, that persons who have suffered repeated paroxysms of gout, *very rarely* became free from it during the remainder of their lives. This constitutes, in medical language, an *incurable* disease. There is no doubt that many persons, who have been attacked in the prime of life by this *sæva regina dolorum*, have, by means of regimen, remained free from any repetition of their sufferings for several years; and probably a large majority of such subjects might enjoy a similar exemption, if they possessed sufficient resolution to adhere strictly to the plan prescribed. The gout, however, notwithstanding the most rigid observance of regimen and temperance, will return at some time or other. These facts have been proved by sufficient time, observation, and experience. Another opinion, highly injurious to the advancement of medical science, has unfortunately sprung out of the former. It is, that the gout is not only incurable, but that every attempt to mitigate the sufferings of the patient is attended with great danger. This opinion has paralysed the faculty of medicine, and opprobriated the profession for two hundred years at least. But the liberal, enlightened, and correct Heberden has given a testimony, which justifies his juniors in exerting themselves to seek after more successful means of mitigating at least the miserable torments of arithritic sufferers. The valuable communication from Dr. Adams, contained in this Number, p. 141, on the efficacy of bark in relieving gout; the extract of aconite and cicuta, the vapour bath, the antiphlogistic plan of applying leeches and cold to the parts affected, all which have appeared in previous Numbers of our Journal, prove that the possibility of safely mitigating the tortures of gout is established beyond controversy. The author of the pamphlet before us has introduced a *new* article into the *materia medica*, which, we believe, will be a valuable addition to it.

The exhibition and effects of this vegetable production have been witnessed by a considerable number of respectable medical practitioners, some of whom have used it in their own cases; and the testimonies of the noblemen and gentlemen who have received unequivocal relief from the use of it, can leave no doubt in our minds that the proposed remedy merits particular attention, both from the profession and the public at large But here a question obtrudes itself, how far any respectable practitioner is justified in using or recommending a medicine, with the preparation and composition of which he is not familiar? All chemists know, that *vegetable* preparations cannot admit of any *analysis* which may lead to the slightest knowledge of their medicinal properties; and a chemical analysis of *mineral* preparations can do no more than

discover

discover the ingredients; and we infer the virtues from the known analogy of similar preparations, which must be loose and unsatisfactory. The only rational means then by which the virtues of any proposed remedy can be investigated, are repeated and well observed trials of it in the human subject. Mr. W. has pursued this plan; and as far as three or four years experience can establish a medical fact, he has proved his medicine to be safe and efficacious.

An Answer to Mr. Goldson; proving that Vaccination is a permanent Security against the Small-pox. By John Ring, Member of the Royal College of Surgeons in London.* 8vo. pp. 43. London, 1804.

It might be expected that Mr. Ring's vigilant zeal in the cause of vaccination would be roused by Mr. Goldson's pointed attack on the utility of the Jennerean discovery, of which we gave an ample detail in our last number. The subject is so extensively important, and the attention excited by Mr. Goldson's publication has been so considerable, that we think it necessary, without delay, to state the leading particulars of Mr. Ring's answer, and the objections which he urges against the validity of Mr. Goldson's statements. In this, as in the former case, we shall chiefly confine ourselves to a fair representation of the writer's arguments, and a few observations on their consistency, leaving our readers to make their own inferences from what is advanced. We may premise that Mr. Ring's defence of vaccination against Mr. Goldson's statement, turns upon two points; either that the vaccination was insufficient, owing to faulty matter, and irregularity in the progress of the vesicle; or that the subsequent symptoms produced by small-pox infection, were only such as the introduction of this poison might at any time produce on certain constitutions, however indisputably they might previously have gone through the disorder.

Mr. R. first attempts entirely to vitiate the source of vaccine matter at Portsmouth. This, as we mentioned in our last Number, was sent by the Sick and Hurt Board to Mr. Rickman at Portsea. Of this Mr. R. observes,

"Mr. Goldson thinks it a sufficient proof of the Portsmouth matter having been good, that it was sent thither by a public board: but he has not proved that it was not procured from some place, where the golden rule of Dr. Jenner for taking matter was disregarded; and where matter was frequently taken at so late a period, as to produce spurious pustules, and bring disgrace on the practice.

"As Mr. Goldson has adduced no evidence that the matter was originally good, so he has offered none to prove that it did not remain on the lancets long enough to suffer injury before it was sent to Portsmouth. This was the more likely to happen, when it was taken in the worst mode possible, that is, on lancets; and had two offices to go through; at either of which these lancets

might have remained long enough to become rusty. Mr. Goldson himself justly observes, that the success of vaccination is easily defeated, either from the matter having been originally inefficacious, or from its being deteriorated, and suffering a decomposition by a variety of means.

"With the matter received from London, Mr. Rickman inoculated five marines; and, with matter taken from the arm of one of them, he inoculated Clarke, whose case was communicated to the Committee of the House of Commons. This man, it was said, afterwards had the small-pox; and it is therefore an object of the first importance to ascertain, as far as possible, whether he ever had the cow-pock.

"In order to form a proper judgment in this instance, it ought to be recollected, that the matter issused from a doubtful source; that it was not taken till the 11th day, by which time it has often lost much of its virtue, and is apt to produce a spurious pustule; and that the only witnesses of its effect were persons, who had not the least pretensions to any knowledge or experience in the practice. It is, therefore no wonder the House of Commons considered this case as of no weight, when placed in opposition to the strong evidence brought forward by Dr. Jenner. And again,

"Mr. Goldson tells us, that in the course of his experiments, Mr. Rickman *soon found the matter run rapidly into a purulent state after the eighth day.* No stronger proof can be given that it was not good. This was the source of the matter first used by Mr. Goldson, and other gentlemen in the neighbourhood of Portsmouth."

In the usual progress of the vaccine vesicle, when no local injury happens to the arm, the contained fluid is at no time *purulent*, but, on the contrary, quite limpid to the last day that it can be obtained. This circumstance affords some ground of suspicion as to the efficacy of the matter originally employed; at the same time it is proper to state, that if Mr. Goldson's account be correct, vaccine inoculation from the same source, has produced, in numerous instances, the perfect disease, and has proved a complete prophylactic against repeated exposure to small-pox. Allowing the facts, the contradiction can only be explained by admitting the possibility of both perfect and imperfect vaccination from a vitiated source, under similar circumstances, and in each case with an entirely regular progress of the inoculated vesicle

The case of Mr. Grant's child comes next under consideration. It was inoculated not with *Portsmouth matter*, but by Mr. Paytherus in London. No doubt is thrown on the genuineness of the matter here employed, and the perfect vaccination of the child. The eruption, which took place on the night between the sixth and seventh day, Mr. Ring attributes entirely to the cuticular inflammation produced by the variolous poison; and which, as Dr. Jenner has acutely remarked, is excited much more speedily in constitutions previously variolated or vaccinated, than where the

poison

poison produces the true small pox; and hence the rapidity of this inflammation is a pretty sure criterion of the constitution being secure from genuine variola. Mr. R. also points out, in the relation of this case, a small difference between Mr. Goldson's narration and that of Mr. Grant, the father of the child, in the time of the accession of the first symptoms of fever. On the evening of the seventh day the child was attacked with rigor and fever, and on the following morning a few eruptions appeared. On this Mr. R. remarks,

"As to the rigor, it is a common effect of suppuration; and the small pimples which appeared the next day were, in all probability, nothing but a miliary eruption. This eruption, it is well known, is the natural consequence of a hot regimen; and, in the present instance, there was a hot regimen with a vengeance.

"First, the child was rubbed before a good fire; then recourse was had to flannel and warm Madeira; and, lest any one stimulus should be wanting, an anodyne, as it is called, which commonly contains that powerful stimulus, opium, was administered by Mr. Goldson. With such an accumulation of heat, it is no wonder there were a few eruptions; it is rather a wonder the child was not covered with eruptions from head to foot.

"The small pimples which appeared, and caused such a terrible alarm, did not suppurate; but, in three days time, were covered with a warty scurf, which was rubbed off the following evening. If this is the small-pox, it is a sort of small-pox never heard of till now."

Mr. Ring proceeds to shew, by very satisfactory evidence, that the production of a local variolous pustule by inoculation after small-pox, occasionally of fever, and of a slight crop of pustules, is by no means an uncommon circumstance, and that the reason why we have had no more instances of such occurrences after variolous inoculation is, that the confidence in the efficacy of small-pox inoculation has been so complete, that few persons would give themselves the trouble of re-inoculation.

Having thus impeached the character of *Portsmouth matter* on the one hand, and shewn the possibility of mere cuticular inflammation by small-pox matter producing constitutional affection on the other, Mr. R. passes over the rest of Mr. Goldson's cases (which are all those inoculated by Mr. G. himself, and by Mr. Weymouth of Portsea) with very slight notice: either the vaccination was imperfect, or the subsequent disease was not genuine constitutional small-pox. One observation, however, requires some comment: in Mr. G's third case, the child, after supposed satisfactory vaccination, caught the small-pox, not by inoculation, but by casual contagion. Of course, cuticular inflammation is here out of the question, and Mr. R. therefore denies the genuineness of the vaccine inoculation. To prove it satisfactory, Mr. Goldson states, that two years afterwards the child slept with another child in small-pox for several days, wore the same night-

 cap,

cap, and, in short, was as much exposed to contagion as possible. On this Mr. Ring makes the following remark.

"It is too ridiculous to conclude, that, because a child did not catch the small-pox when she wore an infected night-cap, she could never catch it while she lived; and, unless gentlemen can bring better proofs than these of a temporary security arising from vaccination, they had better put on their own night-caps, and go to bed.

"The truth is, that it is no uncommon circumstance for a person to catch the small-pox who has resisted it before; and even resisted it for a long time, in every form, and every degree of exposure. Many a parent, after attending several children successively in the small-pox, and arriving at an advanced period of life, has at length fallen a victim to that disease."

There is nothing very *ridiculous* in the supposition, that a child who has once resisted such a degree of small-pox contagion should be ever after secure from the disease: no practitioner after such a test would hesitate in asserting the *high probability* of future security throughout life; and we appeal to Mr. Ring's candour, whether he would not have used this circumstance as a most powerful argument for the permanent efficacy of vaccination to any of his own patients, or to this very case, had not the event turned out so contrary to expectation. That we are not mistaken in this assertion, let us judge Mr. Ring from his own words. In his letter to Mr. Grant, here inserted, Mr. R. observes, "I have long since discontinued the practice," (of re-inoculating vaccinated patients with small-pox matter) "satisfied with exposing my patients, after vaccination, to the natural infection of the small-pox. This, which, on my assurance of safety, is submitted to with the utmost confidence, has removed all remaining doubt from the parents of the children vaccinated by me, who now amount to about two thousand five hundred. Many of these have been put into bed with persons labouring under the confluent small-pox, or wrapped up in sheets just taken off from the beds of variolous patients, with impunity." Will Mr. Ring, therefore, point out how many times of safe exposure to small-pox contagion is necessary to render the idea of permanent security probable, or where it ceases to be ridiculous? Nevertheless, we are far from supposing that this single case of Mr. Goldson's is to outweigh the strong evidence of the permanent efficacy of *perfect* vaccination; and we think the following testimonial one of the most valuable parts of Mr. Ring's pamphlet, because it is simple indisputable evidence:

"Three children of Mr. Henry Jenner, inoculated five years ago, have since been repeatedly inoculated with variolous matter, and exposed to the infection of the natural small-pox in its worst form, every year up to the present time, without catching the disease.

"Read,

"Pead, vaccinated by Dr. Jenner more than six years, and Phipps, his first patient, vaccinated by him more than eight years ago, have been frequently put to the same tests with impunity. In the spring of the present year, they were inoculated for the small-pox with matter in the most active state; but they resisted infection.

"These patients were all vaccinated with matter from the human subject. Time, therefore, *has decided the question*, whether cow-pock matter degenerates in the human subject, and decided it against Mr. Goldson.

"Instances out of number might be adduced, if necessary, in support of this position. The cow-pock is transfered by the milkers, not only from one cow to another, but also from one farm to another; which could not be the case, if the matter lost its virtue after the first remove from the cow. One instance lately occurred, which furnishes an incontrovertible proof, that vaccine matter, whether generated in the cow or in the human subject, is the same. A woman lately applied to Dr. Jenner, who had the cow-pock when a child. She caught the disease by handling the rags which came off from her sister's fingers. Dr. Jenner inoculated her for the small-pox; but she resisted the infection.

"I shall here insert two other cases; with which, as well as almost every thing else relative to the subject of vaccination, I have great reason to believe, both from the tenor of his pamphlet, and from intelligence I have received, Mr. Goldson and his friends are totally unacquainted. The first case, which was published by Dr. Barry, is as follows: A gardener, who lives with a gentleman of Dr. Barry's acquaintance, infected himself with the cow-pock, by rubbing himself against another person who had received the infection from the cow, from a conviction that it would preserve him against the small-pox. This happened several years ago. Since that time he has often voluntarily exposed himself to the infection of the small pox, and even lain in the same bed with his children, when they were covered with it, but never caught the disease.

"The other case was published by Mr. Creaser. It was communicated to him by Mr. White, of Landsdown Place, Bath. About twenty-three years ago, John Bright, a labouring man, whom Mr. White sometimes employs, lived at a farm. His fellow-servant, who had the cow-pock, communicated the distemper to him in a frolic, by means of a scratch on the hand. He has since been repeatedly inoculated for the small-pox. He has also had the disease in his family, and been exposed to it under its most malignant form, but still escaped infection."

A very pointed evidence from the Vaccine Institution of Edinburgh is also given in favour of the undiminishing power of vaccination through three, four, and even five years.

What then remains to be done by the advocates of vaccination? Mr. Ring, it will be seen by the following passage, is for standing

aloof

aloof from all attempts by experiments at doing away the impression made on the public mind by Mr. Goldson's statement.

"Mr. Goldson solicits the Vaccine Institution to make fresh experiments, in order to decide a question which is long since decided. What institution he means may, like a considerable part of his observations, admit of a doubt. Whether there be any vaccine institution that will so far disgrace the cause, as to repeat such experiments at Mr. Goldson's request, and whether there be any vaccine institution that would not disgrace itself by such an act, I shall not presume to determine; but the Royal Jennerian Society have passed a resolution, that Mr. Goldson's pamphlet does not, at present, require any notice from them. I trust they will still adhere to that resolution:

"Nec deus intersit, nisi dignus vindice nodus.

"It does not require a hundred able heads to plan, nor a hundred able hands to execute, the simple task of putting vaccine patients to the test. It is what any head, however weak, can plan, and any hand, however unskilful, can execute.

"But when we consider what a vast number of persons have been vaccinated in this metropolis, and are daily exposed to the danger of catching the small-pox in the natural way, we cannot but deem it a work of supererogation to try such experiments again if they are innocent, and a crime to try them again if they are attended with danger."

Probably the impression made by Mr. Goldson's cases will subside, and the appearance of contravening evidence will sooner or later be entirely lost in the daily accumulating mass of testimony in favour of vaccine inoculation pouring in from every quarter of the globe; but why should any of the friends of this practice hesitate immediately to institute those experiments which may speedily put an end to the controversy? Why should they think it a disgrace in such a cause, and with such reliance on success, to convince the doubtful, silence the malicious, give confidence to the anxious, and hasten the great object of all their endeavours, the annihilation of the small-pox from the face of the globe? Some consistency too should be preserved with regard to the alleged security of the proof-trial of subsequent variolous inoculation. It has been hitherto an argument of no small weight in the hands of the friends of vaccine inoculation, "it can at least do no harm; first give your child the benefit of the cow-pox and you may then safely try him with the small-pox inoculation, when you will be convinced by the result how perfect is the security which vaccination produces." But if, whilst a considerable part of the public is still averse, or but coldly disposed towards vaccination, the only palpable proof of its efficacy is wantonly held out as full of danger, and not lightly to be resorted to, how much will not such ill-judged zeal injure the cause it strives to serve! What is this mighty danger of variolous inoculation? Mr. Ring himself acknowledges, to have performed it upon eleven hundred persons after vaccination

without

without any untoward accident, and many more hundreds, or thousands of instances, equally innoxious, may be added to the list. Even the cuticular inflammation and consequent symptoms, though as severe as in Mr. Goldson's cases, produce no more than a day or two of indisposition, and an eruption of a few pimples. Mr. Ring will surely not magnify *these* into a disease of very great moment; and the only cases of danger which he brings are two from Buchan, which, however authentic, are little adverted to, on account of the extreme rarity of the occurrence.

The present pamphlet contains several other desultory remarks, for which we shall refer our readers to the original; and here we should close our account, if it were not incumbent upon us to repel an accusation which the Author has thought proper to bring against the manner in which we noticed Mr. Goldson's pamphlet in our last number. For this we must beg our reader's indulgence a short time longer.

We are first accused of inconsistency in exculpating the medical men of Portsmouth from the charge of indifference to professional improvement, at the same time that we urge the local advantages for scientific information of a situation so near to the metropolis, and so constantly communicating with it. The truth seems to be, that if Mr. G's dates are accurate, the profession at Portsmouth can neither claim the merit of early exertions in vaccination, nor yet are they liable to the reproach of culpable neglect. The accusation was trifling, and Mr. G's defence weak.

We are next charged with mistaking the object of Mr. Goldson's dedication. As Mr. G. himself has committed the mistake, (an unaccountable one we acknowledge) we cannot pretend to reconcile his contradictions; but though sent to Salisbury Square, we must still suppose that the author meant to dedicate his book to the Vaccine Pock Institution, for this obvious reason, that Mr. G. addressed his Remarks to some Institution expressly for Vaccination, which had existed long enough to be able to undertake those experiments of reinoculation that he recommends. Accordingly, this respectable Society has taken Mr. G's dedication to itself, and has actually pursued the subject by the sure path of experiment.

As we have no desire to spare ourselves any of Mr. Ring's abuse, we shall insert the following.

"The article in question is one of the many in modern times, which makes us regret that the review of books is a t ade; that it is too often delegated to persons incompetent to the task, too often prostituted to the purposes of party, and too often made subservient to sordid gain. Such a practice cannot be reprobated too severely. On so important an occasion as this, no understrapper should be employed; no partial statement should be admitted; no puff, no misrepresentation, no compliment at the expence of truth, should be suffered to pass without animadversion."

It is our chief object in our monthly notice of new publications, to confine ourselves strictly to critical analysis, or rather, to state more

more or less succinctly the leading contents, with or without occasional remarks on the propriety, originality, consistency, and candour of what is advanced. We have no apprehension of being accused of wilful misrepresentation of matter of fact; and as we make a point of giving the several author's own words, more or less condensed, in the most important statements, there is little danger of much accidental error. Mr. Ring accuses us of admitting Mr. Goldson's statements rather too readily. Now, as all that we have inserted of Mr. G's facts is almost in his own words, and given simply as his own cases, does Mr. Ring mean to charge us with having done *too much justice* to Mr. G.? or, would this enemy of partial statements, have had us suppress a part, and falsify the remainder?

No small portion of the offence we have given to Mr. Ring (we believe) is included in the following accusation.

"But it is puerile to pretend, that a medical man is the more competent to put his cow-pock patients to the test, in consequence of his belonging to a Society. Any individual is qualified for that undertaking; and it is easy to collect witnesses of his proceedings in any town or village in the kingdom. There are several *individuals*, members of the Royal Jennerian Society, besides Dr. Jenner himself, whose practice has been far more considerable than that of the Vaccine Pock Institution, both in extent and duration. It is therefore an insult to deny, that they have it as much in their power to institute further experiments on the subject; as it is a mockery to affirm, that no party is so fit to decide the point, as that which furnished the matter, and of course is interested in the question."

Mr. Ring is not in all cases an enemy to misrepresentation, or he would not have made us express so very absurd an opinion, that a medical man is more competent to reinoculate his patients when belonging to a society than when standing singly on his own experience; or that any "individual member of the Royal Jennerian Society, whose practice has been far more considerable than that of the Vaccine Pock Institution," would not perform a most acceptable service to vaccination, by instituting farther experiments on his own patients; but we do maintain, that the Vaccine Pock Institution *is* particularly called upon in this case, if it furnished the *Portsmouth matter*, and if, from the duration of the Society, it is able to meet the call in a satisfactory manner. Had a similar imputation been thrown on Mr. Ring's matter, would he not have thought himself peculiarly interested in vindicating its genuineness? and though a professed enemy to puffing, would he not, at least on such an occasion, allow himself to state the extent and duration of his own practice, as additional motives for his exertions? Lastly, let Mr. Ring remember, that the pen which is truly *prostituted for the purposes of party*, is that which, without bringing forward the least shadow of evidence, stoops to personal defamation of his opponents, and throws out unequivocal insinuations of sordid and

base

base motives of private gain acting in direct hostility to the efforts of philanthropy and public spirit. The accusation of sinister motives is easily made, and as easily retorted; but the best friends of the Jennerean discovery will the most lament that it is defended by such weapons.

MEDICAL AND PHYSICAL INTELLIGENCE.

[FOREIGN AND DOMESTIC.]

Mr. Buchholz's new Method of preparing Emetic Tartar.

Take of crystals of tartar, two pounds; glass of antimony, one pound and a half, let them be well pulverised, and mix them together. Then pour on the mixture a sufficient quantity of water to make a thick paste. Expose this mixture under a glass bell to the action of the solar rays for about a fortnight, during which time it must be agitated three or four times a day, and a little water added to replace that which evaporates, in order to keep the mass in the same consistency. The mass puffs up, and sulphurated hydrogen gas is disengaged. Flakes of an analogous colour to kermes are perceived, and the whole mass receives a red brown colour. At the end of a fortnight, it is dissolved and washed with boling water, and afterwards filtrated. The insoluble residuum amounts to about three ounces. On evaporating the liquor, two pounds and fifteen ounces of emetic tartar in fine crystals will be obtained. From Mr. B's experiments with the residuum and the crystals of emetic tartar, he concluded,

1. That the glass of antimony may be dissolved by the acidulous tartrit of pot-ash in the state of a paste, and at a middle temperature.

2 That it is only necessary to repeat the crystallization, in order to deprive emetic tartar of iron, and of tartrit of lime.

3. That silica is not found in all glasses of antimony.

4. That under certain circumstances, particularly through the assistance of other saline substances, the tartrit of lime dissolves in great quantity, and even crystallizes regularly.

5. That one part of crystallized emetic tartar requires about fourteen parts of distilled water of 10—12° Reaumur for solution, and not eighty parts, as some chemists have imagined.

6. That 100 parts of boiling water are capable of dissolving 53 parts of emetic tartar, when entirely free from tartrit of iron and tartrit of lime.

—*BILL*

BILL OF MORTALITY,

For Portsmouth, New Hampshire, for A. D. 1802.

By LYMAN SPALDING, M.B. &c.

COMPLAINT.	AGE.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Aphtha	4, 4 weeks									2				2
Apoplexy	66, 33, 55, 43, 63 years	1		1					1		1	1		5
Atrophy	55, 69, 40, 55, 3m. 60 years			1				1		1			3	6
Cancer	55, 63, 60 years										1	2		3
Cankerrash	8, 2, 5, 7m. 2, 16, 23, 4 years										1	1	6	8
Cholera of Infants	6 to 24 months							1	6	2	3		1	13
Cholic bilious	42 years											1		1
Consumption	14, 74, 53, 47, 53, 30, 69, 17, 33, 30, 60, 14, 33, 18, 69, 64, 60, 33, 28, 48, 52, 18, 29, 50, 63, 28, 22, 30	2	2	4	3	7		1	3		2	2	2	28
Debauchery	55, 38 years						1					1		2
Dropsy	69, 50, 84, 52, 89, 24 years		1			1		1		2			1	6
Dropsy in the brain	3, 7, 7, 8, 13 years	1	1	1			1		1					5
Dysentery	3, 2, 2 years									2	1			3
Epilepsy	64, 2, 2 years									1	2			3
Fever and Ague	33 years										1			1
Fever bilious	74, 30, 27 years			1	1							1		3
Fever bilious malignant	44, 31, 41, 13, 35, 21, 30, 40, 30, 13							1	9			1		10

Fever pulmonic	65, 45 years	2												2
Gout	52 years					1								1
Gravel	41 years								1					1
Hooping cough	10 weeks to 1 year	3	3				1			1				8
Infantile complaints	6 days 4 weeks			1				1						2
Measles	7, 1, 20, 4, 9m. 2, 7, 1, 2, 1, 2 years				1	4	5	1						11
Mortification	7 m. 1 year			1						1				2
Old age	94, 90, 78, 76 years			2								2		4
Palsy	60, 74, 64, 50 years	1	1						1				1	4
Phrenitis	30, 12 years					1			1					2
Premature birth		2			1	1	1				1			6
Quinsy	3 years					1								1
Scald head	1 year		1											1
Small pox, natural	33 years			1										1
Small pox, inoculated	1 year			1										1
Casualties. Drowned	48, 60 years					1							1	2
Fall	55 years											1		1
Frozen	82 years												1	1
Poisoned by opium	4 months								1					1
Suicide	32 years		1											1

Total 152

The town has been very unhealthful, some epidemic having raged the whole year. The hooping cough in January and February was very prevalent, and some sporadic cases continued till September. The measles made its appearance about the middle of March, and was very prevalent till July; at which time a bilious malignant fever made its appearance, and continued till August; when the cholera and cankerrash commenced, and continued through the year.

Mr. Schmidt prepares ammoniated iron by dissolving muriat of ammonia in two ounces of water, and mixing with it one drachm of muriat of iron in a deliquescent state, which mixture is then evaporated to dryness.

Mr. J. Heath, of Grocer's Hall Court, has lately given an instance of a young gentleman in the last stage of typhus fever, being cured by the use of yeast.

Dr. Patterson, of Londonderry, will speedily publish, Observations on the Climate of Ireland, and Researches concerning its Nature, from very early periods to the present Time. With Thoughts on some Branches of Rural Economy; particularly recommended in An Address to the Inhabitants and Friends of this Country. To which are prefixed, Preliminary Considerations on the Structure and Functions of Plants—on the Analogy between the Vegetable and Animal System—on the general State of Woods and Plantations, in Ireland, in ancient and modern Times—on peculiar circumstances denoting the various conditions of its Linen Manufacture throughout a series of ages—and on the Utility of a co-operation in works of Art and Science.

This is a *new* work; and is the *first* undertaken in Ireland, to give a connected and concordant view of subjects manifestly of prime importance to the nation. For what can be estimated more valuable to the people of this fertile and favoured isle, than an union of the principles of science with the rules of art, to raise the bounties of Nature to their highest possible degree of perfection, by a skilful and diligent culture of the necessaries of life—those for food, raiment, and dwelling?

Cuvier, the well known natural historian, has lately published a work on the species of animals that have been lost.

Couret de Villeneuve has lately published a botanical work at Paris, containing a description of all the plants that are cultivated in the garden of the Central College at Ghent, arranged according to the Linnean system.

To CORRESPONDENTS.

Communications are received from Dr. Trotter, Dr. Rodman, Mr. Edgar, Mr. Blake, and Candidus.